R O R S C H A C H R E S E A R C H E X C H A N G E

Published Quarterly by the

RORSCHACH INSTITUTE, INC.

Editor

Bruno Klopfer, Ph.D.

Associate Editors

Douglas M. Kelley, M.D.
U. S. Army

Zygmunt Piotrowski, Ph.D.
New York City

With the Cooperation of

Marguerite M. Hertz, Ph.D.
Cleveland, Ohio

Morris Krugman, Ph.D.,
New York City

L. Clovis Hirning, M.D.
Scarsdale, N. Y.

Donald Ross, M.D.
Montreal, Canada

Volume VI
Number 3

J u l y
1 9 4 2

TABLE OF CONTENTS

		Page
1.	A Comparison of the Individual and Group Rorschach Tests Max Hertzman, Ph.D.	89 - 108
2.	The Value and Limitations of the So-Called "Neurotic Signs" M. R. Harrower-Erickson, Ph.D.	109 - 114
3.	Notes on Rorschach "Signs" in Diagnosis and Research W. D. Ross, M.D.	115 - 116
4.	Prognostic Data in Chronic Alcoholism Otto Billig, M.D. and D. J. Sullivan, M.D. . . .	117 - 127
5.	The Influence of the Time Factor on Rorschach Performance Edith A. Weisskopf, Ph.D.	128 - 136
6.	Notes on Publicity	137
7.	Announcements.	138

The Rorschach Research Exchange is the official organ of the Rorschach Institute, Inc. and is published quarterly by the Rorschach Institute, Inc. a non-profit Corporation for the study and advancement of the Rorschach method.

OFFICERS OF THE RORSCHACH INSTITUTE 1942-43

Director: Bruno Klopfer, Ph.D.
New York City

President: Maria Rickers-Ovsiankina, Ph.D.
Norton, Massachusetts

Vice-President: John Benjamin, M.D.
Golden, Colorado

Secretary: Helen Davidson, Ph.D.
New York City

Treasurer: Gladys Tallman, M.A.
New York City

A COMPARISON OF THE INDIVIDUAL AND GROUP RORSCHACH TESTS

Max Hertzman, Ph.D.*

The practicality of the group Rorschach test as demonstrated by Harrower-Erickson (7) has given rise to the need for a variety of comparisons between group Rorschach data and the data obtained from individually administered Rorschach tests. In the original study of the group Rorschach, Harrower-Erickson presented evaluations of various combinations of repeat tests. Some subjects were first tested individually and then by the group technique. For others the procedure was reversed, while still other groups of subjects were given either the individual or the group Rorschach test twice at periods separated by a few days. In this manner it was discovered that many of the differences found between records obtained individually and through the group procedure were more a function of repetition than of the different methods of obtaining the data.

The repeated test experiment is, of course, an essential step in laying a foundation for the understanding of the relation between the group Rorschach and the individually obtained Rorschach. The results presented by Harrower-Erickson indicated that the two situations were much more similar to each other than they were different and that if the individual test was considered the more primary measure there were not many instances of distortions of the personality picture produced through the use of the group test.

If the group test is to be used for extensive surveys of adjustment and personality organizations, not only should we be familiar with the relation between the group and individual Rorschach records of the same individuals for the purpose of evaluating the method, but information on the relation between individual Rorschach norms and group Rorschach norms obtained through having each subject contribute only one record is also essential. When a person is taking a Rorschach test for the second time, particularly if the retest follows his first test by just a few days, we cannot expect the second test to be uninfluenced by the first. Harrower-Erickson has found a number of changes which appear to be a function of repetition. They are:

1. An increase in the number of answers.
2. A shift from the larger to the smaller perceptual units.
3. A change in F percent (occurring in about 30% of 110 subjects).
4. A change in M/ΣC ratio (also in about 30% of the subjects).

Of course these changes do not occur in all subjects (as is shown by some of the figures quoted above), but they do occur with sufficient frequency to be significant factors in affecting norms. On the other hand, we do not know to what degree the similarities that do appear have been produced through the effectiveness of the impressions obtained when the subject was tested for the first time.

This situation calls for evaluations of data obtained from equivalent groups of subjects, some tested by one method and some by the other, as another necessary facet in the understanding of the relationship between the results obtained from the individual and the group Rorschach procedures. Such a com-

---

* Department of Psychology, College of the City of New York.

parison is undertaken in the present study. The similarities and differences obtained here are, of course, not only a function of the two different test situations but also of the type of subjects studied. Still further understanding can be promoted by varying the kind of subjects employed.

There are several kinds of evaluations that can be made of the results obtained through the use of the two procedures. But all would have the same basic aim of determining the degree to which the group Rorschach is a satisfactory diagnostic instrument and how its sensitivity compares with the individual Rorschach. In the present study the emphasis is upon a comparison of the various quantitative features of the Rorschach records. These features are the basis of the bulk of the "signs" used in the various sign approaches to diagnosis and analysis. A number of specific problems related to finding the reasons for differences between the two tests (when they occurred) emerged as the study progressed. The various problems dealt with in this study may, therefore, be enumerated as follows:

1. To evaluate the similarities and differences between the two tests in the various Rorschach factors.
2. To study the distribution of various Rorschach signs in the two tests.
3. To evaluate the effect of the results obtained in dealing with the first two problems on the utility of the group Rorschach test.
4. To make some evaluation of the influence of the scoring limitations imposed on the group Rorschach test on some of the differences obtained between the two tests.
5. To see to what extent some of the results can be accounted for in terms of common modes of perception.
6. To indicate some of the differences in the perception of the two situations which affect the results.

These problems cannot be dealt with in evaluating the results in as discrete a fashion as they have been enumerated here, but the enumeration can serve the purpose of indicating the basic reference points employed in this study.

Subjects:

The subjects employed were 200 male students of the College of the City of New York. One hundred were given the individual Rorschach test and one hundred the group test. In Table I the factors with respect to which the two groups are equated are presented. No attempt at equating for intelligence was made. It would be extremely unlikely, however, that such large groups selected from the highly homogeneous population which is to be found at the City College would differ substantially from each other with respect to intelligence.

Both the mean age and the variability of the age are virtually the same for the two groups. Both groups are represented substantially by first American born generation. While at least ninety percent of the subjects in each group is American born, the majority of their parents are foreign born. This homogeneity goes still farther. Over eighty percent of the subjects from each group were born and lived most or all of their lives in New York City, while the bulk of the foreign born parents originated from three countries: Russia and what were formerly Poland and Austria.

Equivalence in socio-economic background is also indicated by the distribution of the occupations of the fathers of the subjects. The Beckman scale (1) was used to obtain the break-down presented. Eighty percent of the occupations fall into the two middle groups, with very few individuals to be found in the unskilled, semi-skilled or professional occupations.

TABLE I

EQUATION OF THE TWO GROUPS OF SUBJECTS

	SUBJECTS	
	INDIVIDUAL TEST	GROUP TEST
1. Average Age	19 yrs. 5 mos.	19 yrs. 4 mos.
2. Standard Deviation of Age	16.2 mos.	15.9 mos.
3. Birthplace of Father		
a. All foreign	79	76
b. Russia, Poland, Austria	64	66
c. United States	21	24
4. Birthplace of Mother		
a. All foreign	71	74
b. Russia, Poland, Austria	60	64
c. United States	28	26
5. Birthplace of Father and Mother		
a. Both foreign	64	70
b. One parent foreign, one U.S.A.	23	10
c. Both U.S.A.	14	20
6. Birthplace of Subject		
a. New York City	83	85
b. Other parts of U.S.A.	7	8
c. Foreign	10	7
7. Languages Spoken at Home		
a. Only English	32	36
b. Some language in addition to English	68	64
8. Socio-Economic background (Beckman scale)		
Group 1. Unskilled Manual Occupations	0	0
Group 2. Semi-skilled Occupations	6	8
Group 3.	37	42
(a. Skilled Manual Occupations	(32	(39
(b. Skilled White Collar	(5	(3
Group 4.	43	38
(a. Sub-professional Occupations	(5	(2
(b. Business Occupations	(35	(34
(c. Minor Engineering Occupations	(3	(2
Group 5.	14	12
(a. Professional (Linguistic)	(6	(4
(b. Professional (Scientific)	(5	(2
(c. Managerial & Executive	(3	(6

Administration of the tests:

The individual test was administered in the usual fashion, the performance on the ten cards being followed by an inquiry along the lines indicated by Klopfer (10).

The procedure of administering the group test was the same as that employed by Harrower-Erickson (5). The test was administered to six groups varying in size from 14 to 20. Each slide was exposed for three minutes. Slight changes in directions were given as a function of spontaneous questions asked by the members of the different groups. As has been indicated by Harrower-Erickson, such flexibility is necessary and can be exercised without impairing the test.

The modified inquiry, however, differed in some respects from the one used by Harrower-Erickson. After the performance proper, the subjects were instructed to circle and number the areas they had used for their responses as well as to number their written answers to correspond to the appropriate circled areas, as in the original group Rorschach experiment (5). In the original experiment the subjects were further instructed to place the number of their answers under columns found on the inside flap of the test booklet, headed, "Shape", "Color", "Movement", and "Texture", in that order. The instructions for this part of the procedure were carefully given, there being no implication that any or all of these columns need be used or that there was any particular advantage to using one column over another. The instructions merely indicated that shape, color, movement and texture could be factors involved in what the individual saw in the slides and if and when they were present he should indicate that fact.

This aspect of the inquiry was not used in our study. We do not know what is the best form of inquiry for the group Rorschach. It is very possible that the optimal form of the inquiry might be different for different groups of subjects, rather than there being one form that would be best suited for all kinds of subjects. We were influenced, partially by a fear that this form of inquiry might be too suggestive for our subjects and partially because of the need for experimenting with inquiries, to modify our own inquiry still further. The words "shape", "color", "movement" and "texture" did not appear on our booklets, nor were they mentioned in explaining what was wanted. Instead directions like the following were given to each of our groups. "We would like to know as much as possible about the factors which influenced what you saw in these slides. After you have circled your responses we would like you to write on the inner flap what it was about the slide which gave you the impression you got. Or, if you want to explain your concept more fully, tell us more about it. We must have as complete information as possible to score this test properly and we would therefore be interested in your elaborating on the responses which you described in one or two words."

Scoring problems in the group test:

We found the situation to be the same as indicated by Harrower-Erickson (5). Some subjects were frequently surprisingly elaborate in their descriptions, offering virtually no scoring difficulties at all. On the other hand, there were some subjects whose terse remarks, unelaborated in the inquiry, made the scoring problem an exceedingly difficult one. We do not think that supplying these subjects with opportunities for checking "shape", "color", etc., would have improved the situation, with the possible exception of those instances in which a checked determinant corresponded with previously obtained knowledge about the frequency with which that determinant is used for the response

in question. Thus, lacking other information, a check under movement for a response to the animals in card VIII would be scored as an animal movement with the probability that there was an error in scoring it that way being very small. On the other hand, less popular areas and determinants could not be scored with such certainty just on the basis of being listed under a determinant heading. Undoubtedly the check system would be of optimal value in dealing with records which while not presenting elaborated responses in all instances did so with sufficient frequency to furnish an internal basis for evaluating the unelaborated responses in which checks under determinant headings were employed.

In most cases our scoring was based solely on what the subject wrote down. Perhaps the only general exceptions were to rug and animal skin responses to cards IV and VI in which the shading element was incorporated in the scoring even if it were not specifically indicated. This undoubtedly led to some error, but the response was given so frequently without specific mention of texture that failure to score the texture response would have given rise to an even greater error. On the other hand, even such popular responses as the animals in card VIII were not scored as animal movement unless there were specific indications of movement given by the subject.

The various kinds of movement responses offered no particular difficulties, color form and vista responses were easily identified. Greater difficulty was experienced with the form color responses and the Fc responses.

Comparisons between the distribution of locations and determinants in the two tests[1]:

The means and standard deviations and the evaluation of the differences between corresponding means for the number of responses, the locations and the determinants are presented in Table 2.

An immediately complicating factor in the evaluation of these results is the great difference in the number of responses given in the two situations. While the mean of 38.4 responses obtained for the individual Rorschach test corresponds to the level reported on other college groups (14), the mean of 25.1 responses on the group Rorschach is low. This particular finding may very well be specific to the group studied[2]. We would certainly not infer from these data that the group Rorschach test would usually produce fewer responses

---

1. I wish to express my gratitude to Leonard Greenberg, Robert Levine and Roy Schafer for their invaluable aid with the statistics of this paper and to the National Youth Administration for making their services possible.

2. Munroe (13) reports that in comparing the individual and group Rorschach on samples of Sarah Lawrence College women, totalling over 100 subjects in each group, the results with respect to the number of responses are the reverse of those reported here. In the individual test the median number of responses was low, in the group test the median number was much higher. These findings point to the likelihood of attitudinal factors being very important in determining the total number of responses and thus indirectly the number of responses involving the various determinants. It is not possible in this paper to determine what these attitudinal factors are. This is in itself a problem for research.

TABLE II

MEANS AND STANDARD DEVIATIONS OF VARIOUS RORSCHACH FACTORS IN THE TWO TESTS

Factor	Individual		Group		Difference	D/σ_D
	Mean	σ	Mean	σ		
R	38.4	18.1	25.1	9.5	13.3	6.5
W	8.3	4.7	8.4	3.2	.1	.2
D	20.4	9.8	12.4	5.8	8.0	6.8
d	2.8	2.9	1.2	1.4	1.6	4.8
Dd	6.2	6.1	3.0	2.9	3.2	4.6
S	.8	1.4	.5	1.1	.3	1.7
W%	25.9	15.3	38.1	15.9	12.2	5.5
D%	52.8	10.7	46.8	12.1	6.0	3.7
d%	6.6	4.5	5.2	4.8	1.4	2.1
Dd%	14.7	11.4	9.8	7.9	4.9	3.5
S%	1.9	3.1	1.7	3.2	.2	.4
M	3.9	3.4	3.3	2.0	.6	1.5
FM	5.8	2.9	3.0	2.0	2.8	8.2
m	1.5	1.9	.6	1.0	.9	4.3
k	.8	1.3	.1	.3	.7	5.4
K	.6	.9	.2	.4	.4	4.0
FK	1.0	1.8	.5	.8	.5	2.5
F	17.5	10.3	13.6	7.0	3.9	3.0
F%	43.6	12.8	52.9	15.8	9.3	4.6
Fc	2.3	2.0	.9	.9	1.4	6.4
c	.5	.8	.2	.5	.3	3.3
C'	1.0	1.3	.2	.6	.8	5.7
FC	1.9	1.7	1.2	1.4	.7	3.2
CF	1.7	1.8	1.1	1.2	.6	2.7
C	.3	.6	.1	.4	.2	2.9
ΣC	3.18	2.7	1.86	1.6	1.32	4.3
P	5.0	1.5	5.5	1.6	.5	2.3
P%	16.3	9.6	24.8	8.6	8.5	6.6
A%	42.8	12.9	44.9	13.3	2.1	1.1
8-10%	41.0	9.5	38.6	7.0	2.4	2.0

than the individual test. We would expect that the mean number of responses would correspond more to each other in groups where the average for the individual Rorschach is lower than in the present case. A factor which may contribute to the difference in this case is the rather large number of responses given in the individual test in positions other than the normal ones. It was quite characteristic for our subjects in the individual test to feel that two or three responses were not enough. This led to turnings which, when used, usually produced still more responses. In the individual test the time was unlimited and many of our subjects felt they had to give many responses to do well. The time limit in the group situation may very well have acted as a brake for some of our subjects.

On the other hand, the reduced number of responses helps to point up the locations and determinants which have priority value in the subjects' economy and thus may clarify some theoretical points.

Locations:

The absolute number of whole responses is virtually identical in the two situations, being 8.3 for the individual and 8.4 for the group test. Thus the average W% is greater in the group than in the individual test. We believe that the difference is not so much a function of great differences in the two situations as it is a function of the tendency to produce whole responses initially upon seeing a card. There are of course many individual variations but this tendency is very strong, as will be shown in a later analysis oriented towards perceptual problems. In the individual Rorschach 74% of the whole responses and in the group test 90% of the whole responses occurred in the first two responses to each card.

While the difference in average W percent between 25.9 and 38.1 is thus significant, we believe that the difference is largely a function of the differences in the average size of the Rorschach records to be found in the two situations and probably partly a function of the less analytical attitude to be found in the group situation. Small but significant differences are to be found between the D and Dd percents. On the whole the more crude and obvious responses are used frequently in the group situation. The critical ratio between the incidence of the populars of 2.3 is slightly below a significance of one percent. The difference in popular percent is highly significant but may have been brought about largely through the existence of a large proportion of popular whole responses.

Movement:

One of the most interesting features of these results is the difference of the patterning of movement responses in the two situations. While part of these differences was undoubtedly produced by scoring difficulties, the very nature of these difficulties and the manner in which they affected our scoring is, we think, of significance.

The difference in average human movement is small and not statistically significant. In other words, despite the smaller number of responses in the group situation the absolute number of M's produced is on about the same level in the two situations. This would again point to the fundamental and personal role that the human movement responses have among the various productions of the individual to the Rorschach test. On the other hand, there is a drop in the animal movement responses which might be a function of the relative inadequacy of the inquiry in the group situation. However, a situation which is adequate to bring out the human movement responses but not adequate to bring out the animal movement responses fully again points to the differential clarity with which these movement responses are perceived.

For movement produced by outside forces, the incidence is greater in the individual than in the group Rorschach test. Most of these responses are easily identified in the individual situation without inquiry. The difference is probably not due to scoring difficulties. The percent of individuals who have at least one m is 64 in the individual and 39 in the group situation. The critical ratio of this difference is 3.6. This result indicates one small area of lessened sensitivity of the group Rorschach as compared to the individual.

Color responses:

As far as the organization of the color responses is concerned, the relationships in the two situations are identical. The average number of FC

responses is slightly higher than the average frequency of CF in both situations, while in both cases the pure color responses lag far behind. If the frequency of the FC responses is taken as being equal to unity, the relative proportions of these responses would be 1.00, .90 and .16 in the individual test and 1.00, .92 and .08 in the group test.

Color form responses are easily identified in the group Rorschach, and the paralleling of the FC proportions in the two situations would indicate either that the scoring of FC was done with an accuracy close to that afforded by the individual Rorschach test or that a greater proportion of FC responses is actually to be found in the group test and is missed by the inadequacies of the inquiry. The analysis, to be presented later, of specific location areas and of the colored cards will indicate that there is a differential response to specific areas and cards in this situation but we do not think that these differences would materially affect the relation between FC and CF responses.

There is a decreased output of color responses of all varieties in the group Rorschach but this is partially a function of the decreased number of responses and particularly a function of the decreased number of responses given to card X. One could hardly expect that two sets of norms differing markedly with respect to the number of responses per subject would be identical with respect to the frequencies of the major determinants. A subject does not begin by giving movement and color responses and then add, if he has time, the responses determined mainly by form.

On the other hand, the degree to which the absolute level of human movement responses holds up as compared to the decrease in color raises a definite problem. This differential utilization of these two major determinant areas in the group Rorschach might be specific to the kind of subjects employed in this study. In the individual data there exists already a somewhat greater emphasis on movement than on color. The subjects employed in the group test are very much like those used in the individual test. Movement is favored over color in these college students as a whole. With a lower threshold for movement responses than for color responses it is possible that the group situation, while not getting as deeply to the subject as the individual one does, touches off his more readily accessible responses to the same degree as does the individual test.

The lessened interest in color, manifested in the group situation, is also indicated by both the relative frequency of responses made to the last three cards and the average absolute number of responses given to card X. The relative number of responses given to the last three cards is less in the group situation, the critical ratio of 2.0 between the group and individual data indicating that there are 98 chances in 100 that the true difference is greater than zero. The average number of responses given to card X in the group situation is 3.6, as contrasted to an average of 7.5 for the individual data. The critical ratio of 5.5 indicates a very great likelihood of a true difference. In the individual test 19 percent of the total responses are made to card X, whereas in the group test only 14% of the total number of responses are made to that card.

Shading responses:

The largest discrepancies between the two tests, with the possible exception of the animal movement responses, is to be found among some of the shading responses. Some of these differences are probably due to the inadequacy of the inquiry and some are likely a function of the differential char-

acter of the two situations.

The highest critical ratio is to be found between the means of the Fc responses. This may be largely a function of the inquiry. In some preliminary work, using the checking system, we found a strong tendency for almost indiscriminate checking of texture on the part of some of our subjects. Upon interviewing them it was found that they generally employed the texture concept to differentiate the boundary between areas but very few elaborated their written responses to indicate this. It is our general impression that the Fc responses are the ones for which positive evidence is most lacking in the group situation. With respect to the number of subjects having at least one Fc response, the difference is not as great as the differences of the means might indicate, as 62 percent of the subjects in the group and 89 percent of the subjects in the individual situation have at least one Fc response. These figures may be too high for both groups. In the individual test, there is probably a tendency to press hard for shading in the inquiry in those records where there seems to be an absence of shading. This probably produces a number of shading responses which were of liminal value at best and increases the percent of individuals who have at least one shading response. Such responses are undoubtedly lost in the group situation. On the other hand, some of our scoring of rugs and animal skins in cards IV and VI as shading responses may be in error.

The order of differences obtained for the k, K and FK responses is probably produced less by scoring difficulties than by situational differences. The largest critical ratios are to be found for the differences in k and K, both for means and for the incidence of individuals who have at least one of these responses. The k responses, while occurring in the group situation, are probably most facilitated in situations where the individual can examine the cards more closely. The general diffusive nature of card VII, which is so productive of K responses, seems to be lost to a considerable extent in the group situation in the opinion of a number of Rorschach workers queried on this problem. The number of individuals having FK responses, however, does not vary greatly in the two situations, 45 percent in the individual test and 34 percent in the group test having at least one FK response. The group situation is not likely to stand in the way of depth perception and perspective responses.

Form responses:

The mean number of form responses is significantly greater in the group than in the individual set-up. We think that this is largely due to scoring differences and, in this area, largely due to the discrepancies found in the animal movement responses. Animal movement is the most popular determinant in the individual test and a close runner-up to human movement in the group test. If different methods of inquiry would have raised the average number of FM responses by 2 (the resultant average would still be below that of the individual average), the mean F percent would not differ very markedly in the two situations.

Relative proportions of determinants to be found in individual and group tests:

Because the two tests did differ so markedly from each other with respect to the number of responses a general survey of the relative frequency of each determinant might be of interest. The necessary data are presented in Table 3. From the point of view of relative proportions the corresponding frequencies are not very much out of line with each other. The only significant differences are between F percent with a critical ratio of 5.3 and total shading with a critical ratio of 2.7. The order of frequencies in the thirteen determinants employed are also very similar to each other in the two situations. The rank difference correlation is .96. From this total point of view the two situ-

ations are not markedly different from each other. From the point of view of individual analysis, of course, many of the small differences may nevertheless loom large in importance.

TABLE III

RELATIVE DISTRIBUTION OF THE DETERMINANTS

Determinant	No Responses Individual	No Responses Group	% Responses Individual	% Responses Group	D	D/σD
M	394	333	10.3	13.3	3.0	1.2
FM	581	298	15.1	11.9	3.2	1.3
m	153	61	4.0	2.4	1.6	.7
k	81	14	2.1	.6	1.5	.6
K	61	16	1.6	.6	1.0	.4
FK	99	51	2.6	2.0	.6	.3
F	1691	1356	44.1	54.1	10.0	5.3
Fc	232	93	6.1	3.7	2.4	.9
c	49	22	1.3	.9	.4	.2
C'	98		2.6	1.0	1.6	.6
FC	193	120	5.0	4.8	.2	.1
CF	170	107	4.4	4.3	.1	.04
C	34	13	.9	.5	.4	.2
Total Responses						
Movement	1128	692	29.4	27.6	1.8	1.1
Shading	522	196	13.6	7.8	6.8	2.7
Color	397	240	10.4	9.6	.8	.3

Comparison of the incidence of various "signs" of adjustment in the individual and the group tests:

The development of the group Rorschach test was given impetus by the need for an adequate personality test which could be used on a mass basis. For this purpose its projected practical application at present is as a screening test to be used for classifying individuals into broad categories. In many instances it is, of course, possible to employ group Rorschach protocols for more intensive analysis. In the rougher screening procedure a good deal of reliance would have to be placed on the various Rorschach signs of adjustment or maladjustment. Consequently, a study of the way in which the two tests shape up with respect to the variety of signs that have been designated is of significance. A further advantage of the sign systems for quick analysis is that the bulk of them lean heavily on quantitative discriminations. This may lead to considerable distortion in individual cases but it is nevertheless a necessary technique in dealing with large numbers of individuals. Their applicability in broad surveys has been aptly demonstrated by Hallowell (4) in dealing with the problem of acculturation. Using 23 Rorschach signs of adjustment he found substantiation of his general impressions, obtained from field investigation, that the more acculturated group of Indians he was studying contained greater proportions of both the most adjusted individuals and the most maladjusted individuals than were to be found in the less acculturated group.

In the present investigation a variety of different signs culled from the "neurotic" signs designated by Miale and Harrower-Erickson(11), signs used

by Munroe in the development of the inspection technique(12), and "adjustment" signs designated by Davidson(3) have been used. In addition a number of critical points in some of the distributions of Rorschach factors not included by these investigators have been studied. The evaluation of color and shading shock is not presented here[1].

In presenting the results of the sign analysis in Table IV, we thought that it would be preferable to organize the material functionally rather than in accordance with the source of the sign dealt with. Using the dichotomy of adjustment and maladjustment as the point of departure, the data are divided under (a) differences indicating more adjustment when the individual Rorschach is used, (b) differences indicating more adjustment when the group test is used and (c) no differences between the two situations. For convenience we have taken a critical ratio of 2 as the boundary line of the neutral zone. In other words, differences whose critical ratios are below 2 are taken to mean that there is no substantial difference in the two test situations. The greater this zone, the greater is the comparability of the tests for a sign approach. Among the "significant" differences not too much weight should be placed on those with critical ratios below 3. There are 7 signs in "favor" of the individual test, 5 in "favor" of the group test, 5 signs of less significance in "favor" of the group test and 10 signs, among which are some of the more significant ones, in the neutral zone.

If we examine the neutral zone first, we find that the two groups are not differentiated from each other with respect to various significant movement and color signs. On the movement side, we find equivalence with respect to the frequency of individuals who have zero or one human movement response, and with respect to the relative frequency of three or more human movement responses. On the color side, the two groups are not differentiated with respect to the number of individuals who give no color response at all, the number who give no form color responses and the number who have a "favorable" color balance. Neither are the two tests reliably differentiated with respect to our over-all estimates of shading and color shock.

In addition, no significant differences are to be found between the relative incidence of refusals, optimal W/M balance, minimum number of popular responses, animal percent equal to or more than 50, and large overstressing of W responses.

The individual test produces more "adjustment" signs (or fewer "maladjustment" signs) for low number of responses, F percent, the percent of responses made to the last three cards, and the presence of at least two shading responses of Fc and/or FK variety. Perhaps the most important differentiating signs are in the color area. There is a significant difference for FC equal to zero or one and for the ΣC equal to 2 or more.

For the most part the maladjustment signs which appear less frequently in the group test and the adjustment signs which appear more frequently are not critical ones. In a college group of the age sampled here FM greater than M can hardly be considered a sign of maladjustment(9). Harrower-Erickson(6) has indicated that FM/M greater than 2 is a more reliable indicator. Hertzman

1. Estimates of shading and color shock were of course made for each of the 200 records in this study. But we feel that the problem of the comparison of color and shading shock in the individual and group situations requires a much more careful comparison than can be presented at this moment. We are much more concerned with the nature of the various disturbances and indices that are labelled color or shading shock than with the labelling process itself. The work of Brosin and Fromm(2) not only helped clarify the problem but in many ways indicated its complexity. We hope to present at some later date an analysis of the relationship between the kinds of disturbances produced by color and shading that are found in the two test situations and their relation to each other.

and Kay (8) have found that the latter sign differentiated groups of individuals of different levels of adjustment while the sign FM greater than M did not.

Pure color responses, while occurring with differential frequency in the group and individual tests, do not occur with sufficient frequency to influence a total sign picture greatly. A similar situation exists with respect to the W% being less than 15. The influence of m and k+K can be better understood in terms of patterns than as signs(8).

As far as the sign approach is concerned, this analysis shows that the group Rorschach test compares favorably with the individual test. With a slight change in some of the critical points used and the elimination of doubtful signs, the material obtained from the two sets of data would come very close to each other. Because of the general lowering of the response level and the color level found in our data we would eliminate the number of responses as a sign, change the form color sign to the absence of any FC response*, and lower the criterion for an acceptable sum of color. The F percent equal to or greater than 50 and the sign FM/M greater than 2 would still stand out as major signs differentiating the two sets of data.

TABLE IV

EVALUATION OF THE DIFFERENCES BETWEEN THE RELATIVE FREQUENCIES OF VARIOUS RORSCHACH "SIGNS" IN THE INDIVIDUAL AND GROUP TEST

"Signs" MORE "FAVORABLE" TO INDIVIDUAL TEST	PERCENTAGE OF SUBJECTS HAVING EACH SIGN			
	% Individual	% Group	D	D/σD
1. R ≦ 25	23	66	43	6.7
2. FC ≦ 1	42	70	28	4.1
3. R ≦ 20	15	39	24	3.9
4. FK + Fc ≧ 2	62	38	24	3.5
5. F% ≧ 50	33	56	23	3.3
6. ΣC ≧ 2.0	66	45	21	3.0
7. 8-10% ≦ 40	54	36	18	2.6
"SIGNS" MORE "FAVORABLE" TO GROUP TEST				
8. k + K > 0	65	25	40	6.2
9. FM > M	70	40	30	4.5
10. FM/M > 2	34	11	23	4.1
11. W% < 15	24	6	18	3.8
12. m > o	64	39	25	3.6
(DIFFERENCES OF LESS SIGNIFICANCE)				
13. No pure C	75	89	14	2.6
14. Dd + S ≦ 10%	43	59	16	2.3
15. M = 0	11	3	8	2.2
16. W > 5	72	84	12	2.1
17. ΣC > Fc + c + C'	42	56	14	2.0
NEUTRAL "SIGNS"				
18. A% ≧ 50	30	40	10	1.5
19. FC = 0	27	36	9	1.4
20. ΣC = 0	12	19	7	1.4
21. P ≧ 4	82	89	7	1.5
22. W% > 50	11	18	7	1.4
23. Refusals	8	3	5	1.2
24. M ≦ 1	21	16	5	.9
25. W/M between 1.5-3.0	33	36	3	.4
26. FC ≧ CF + C	45	46	1	.1
27. M ≧ 3	61	61	0	0

Modes of perceptual reactions to the individual and group tests:

As indicated in various parts of this report, some of the differences obtained between the two tests are a function of differences in the accuracy of scoring, which itself is a direct function of the limitations of the inquiry in the group set-up. Some of the differences, however, must be due to the fact that the two situations present different field conditions and, therefore, bring about somewhat different behavior. We cannot treat this problem exhaustively but we hope to illuminate some of the striking similarities as well as some of the striking discrepancies between several of the norms of the two tests by a more careful investigation of the conditions influencing various responses. For this purpose we are investigating the whole and the movement responses, whose absolute level was about the same in the two tests, and the animal movement and color responses, whose absolute level was lower in the group than in the individual test.

Analysis of the whole responses:

The equivalence in absolute number of whole responses in the two situations despite the difference in total number of responses suggested the likelihood that the bulk of whole responses are given before other responses are made to the cards. In Table V, an analysis of the relative frequency with which whole responses are given in different ordinal positions of the response sequence is presented. In both situations more than half of the whole responses made to the Rorschach cards are first responses to a card. The first two positions are the locus for three-quarters of the whole responses in the individual test and nine-tenths of these responses in the group test. The tendency to utilize wholes initially is very great in both situations, but even greater in the group than in the individual set-up. This difference may be due in part to whole impressions being obtained more readily when the blots are at a distance from the subject.

TABLE V

DISTRIBUTION OF WHOLE RESPONSES IN ACCORDANCE WITH THEIR ORDINAL POSITION IN THE RESPONSE SEQUENCE

Position	No Responses Individual	No Responses Group	% Responses Individual	% Responses Group	D	D/σD
First Response	456	596	55	70	15	6.2
Second Response	153	171	19	20	1	.5
Third Response	91	57	11	7	4	2.7
Fourth or later Response	128	29	15	3	12	8.0

Analysis of human movement responses:

A similar analysis of the human movement responses, presented in Table VI, indicates a very strong tendency for these responses to appear early in the protocols for each card. But the frequency with which the human movement responses appear as the initial response in the individual test is much less as compared with the same tendency for the whole responses. In the group situation human movement and whole responses appear as a first response with about equivalent frequency. The frequency with which human movement responses appear in the first position as compared to other positions is 38 percent in the individual situation and 64 percent for the group. This would indicate that the total fields involved in the two situations differ from each other in

some marked respects. Either the perceptual field produced by the slides facilitates the immediate perception of human movement or some aspect of the attitude developed in the group situation loosens the subject's inhibitions.

These data would indicate that different end products are seen in the initial perceptions of the cards or slides in the two test situations. The actual factors influencing the differential perception can only be guessed at here. To be handled properly, specific experiments have to be designed to deal with these findings. The main function of these findings is to indicate that there are differences in the modes of perceiving in the two situations.

Differences are also indicated by the relative distribution of the human movement responses among the different location areas. In the individual test, the plurality of human movement responses is to be found in the large normal detail areas. About one-third of the M responses are to be found in the whole areas. On the other hand, 65 percent of the M's are associated with whole responses in the group test and only 28 percent with the large normal details. There is a definite reversal of the distribution of M's in one test as contrasted with the other. The difference cannot be attributed wholely to a change in the manner of approach. While the relative number of whole responses is greater in the group test than it is in the individual test (the absolute number is the same), we find, from Table I that there are still many more large normal detail responses given in the group test than there are whole responses. This phenomenon in the group test is possibly associated with the ease of seeing popular or near-popular responses. The human movement responses to the whole of cards II, III and VII were given quite readily in the group situation.

TABLE VI

DISTRIBUTION OF HUMAN MOVEMENT RESPONSES IN ACCORDANCE WITH THEIR RELATIVE ORDINAL POSITION IN THE RESPONSE SEQUENCE AND IN ACCORDANCE WITH THE VARIOUS LOCATIONS THAT THEY ARE TO BE FOUND IN

Position or Location	No Responses Individual	No Responses Group	% Responses Individual	% Responses Group	D	D/σD
First Response	148	212	38	64	26	7.0
Second Response	70	63	18	19	1	.3
Third or Later Response	176	55	44	17	27	7.9
W	142	213	36	65	29	8.1
D	180	93	46	28	18	4.7
d	19	3	5	1	4	3.1
Dd	51	19	13	6	7	3.2
S	2	2	.6	.6	0	0

Analysis of some popular animal movement areas:

To further examine the discrepancy between the frequencies of animal movement responses that was found in the two tests some popular animal responses were studied. The responses studied were (a) the popular bat or butterfly response to card I, (b) the animals in card II, (c) the bat or butterfly in card V and (d) the animals in VIII. Comparisons were made (a) between the frequency with which the usual response was made to each area, (b) the frequency with which the response was scored as animal movement and (c) the relative frequency with which the response was given as an animal movement response in light of the

frequency with which the usual response was given. This last measure was obtained by dividing the number of times the response was given as a movement response by the number of times it was given at all.

For the three of these responses which are whole answers the frequency in the two test situations is just about the same. No critical ratio of the difference is as high as 1. While the animals in card VIII, a large normal detail response, are utilized with great frequency in both situations, the frequency in the individual situation is greater.

In all cases the animal movement response is given more frequently in the individual test, but only in card VIII is the critical ratio of the difference greater than three. For the answers in cards I and V the animal movement responses of bat or butterfly have rarely been noted for their vigor in the individual test. An examination of the inquiries for the animals in card VIII, in the individual test, reveals a fair number of instances where the movement given is quite weak and certainly not elicited spontaneously from the subject.

This again makes us feel that some of the differences in the two tests with respect to animal movement is a function of the lack of impressiveness of some of the animal movement responses. They do not influence the subject to make a spontaneous recording indicating a perception of movement.

TABLE VII

COMPARISON OF POPULAR ANIMAL MOVEMENT AREAS IN THE TWO TESTS

Card	Individual (%)	Group (%)	D	D	D/ σ D
I. Bat, butterfly, etc.					
a. Total	47	53	6	7.1	.8
b. No. FM	20	14	6	5.3	1.1
c. FM% $\left(\frac{FM}{Total}\right)$	43	26	17	9.4	1.8
II. Animals					
a. Total	39	37	2	6.9	.3
b. No. FM	34	27	7	6.6	1.1
c. FM% $\left(\frac{FM}{Total}\right)$	87	73	14	9.1	1.5
V. Bat, butterfly, etc.					
a. Total	86	85	1	5.0	.2
b. No. FM	40	24	16	6.6	2.4
c. FM% $\left(\frac{FM}{Total}\right)$	47	28	19	7.3	2.6
VIII. Animals					
a. Total	96	86	10	4.0	2.5
b. FM	78	51	33	6.6	5.0
c. FM% $\left(\frac{FM}{Total}\right)$	81	59	22	6.6	3.3

Analysis of the color responses:

The evaluation of the appearances of color responses in the different color cards is to be found in Table VIII. The absolute frequencies as well as the relative frequencies are presented. The relative frequencies were calculated by dividing the number of color responses of a given category for a given card by the total number of color responses given to all five cards. While large discrepancies appear, the actual number of such discrepancies are few.

Despite the lowered number of color responses of all varieties to be found in the group test as contrasted to the individual test, we find considerably more form color responses in card III for the group test than for the individual test. When an analysis was made of the most popular color area on this card, the center red, the following was found: This area was chosen and responded to in a popular fashion far more frequently in the group than in the individual test. (The relative frequencies were 58 and 31 percent respectively). The difference between the two frequencies was significant. The percent of times that this area, once chosen, was responded to as an FC did not differ significantly in the two situations. The entire difference was, then, a function of the more frequent choice of the popular response in the group situation. Interestingly enough, this area was used more frequently in the individual test than in the group test for responses other than the popular ones. These responses contributed a great many of the CF responses to this card and were largely accountable for the difference in CF for this card in the two test situations. In this case a color difference seems to be largely an effect of the great extent to which popular and, in general, more simple responses were made to the group test.

There are slightly more color responses to card IX in the group than in the individual test. In fact the total color responses to cards II, III and IX are virtually identical in the two test situations, numbering 131 responses in the individual and 130 in the group test. The differences are to be found to some extent in the reactions to card VIII, but mainly to card X. In card VIII, the absolute number of FC responses is virtually identical under the two conditions, the difference being only in CF+C. This difference is brought about largely by the greater use of the lower portion of this card for CF responses under individual conditions.

But by far the greatest discrepancy is created by the differential utilization of card X. Fully 59 percent of all FC responses given in the individual situation are given to this card. Forty-five percent, or nearly half, of all color interpretations are given to this card in the individual situation as contrasted to 23 percent in the group test. As indicated in a previous section of this report, we feel that one of the most important factors accounting for this result is the exceedingly greater number of responses made to this card in the individual test. The distribution of the number of responses to this card for the individual test spread-eagles that of the group test, as almost any set of figures will show. Not only is the mean of the individual test more than twice as great as that for the group test, but the spread of the individual test is much greater. The standard deviation of the distribution for the individual test is 6.2, while it is only 1.6 for the group. Only 12 percent in the group test gave more than 5 responses to this card, while 64 percent did so in the individual test. The differential number of responses to this card does not account for all of the discrepancy but it is by far the major factor. Other factors might be the difficulties in scoring accurately because of the limited inquiry and the possibility that the colors as reproduced in the slides were not as stimulating for color responses as those on the cards.

(There were some noticeable differences in some of the color qualities of the slides as compared to the Rorschach cards.)

TABLE VIII

ABSOLUTE AND RELATIVE DISTRIBUTION OF COLOR RESPONSES IN THE TWO TESTS

Card and Determinant	No Responses Individual	No Responses Group	% Responses Individual	% Responses Group	D	D/σD
FC, Card II	14	11	7	9	2	.6
FC, Card III	20	34	10	28	18	3.9
FC, Card VIII	25	24	13	20	7	1.6
FC, Card IX	20	26	10	22	12	2.7
FC, Card X	114	25	59	21	38	7.3
CF+C, Card II	29	17	14	14	0	0
CF+C, Card III	16	5	8	4	4	1.5
CF+C, Card VIII	62	31	30	26	4	.8
CF+C, Card IX	32	37	16	31	15	3.0
CF+C, Card X	65	30	32	25	7	1.3
Total, Card II	43	28	11	12	1	.4
Total, Card III	36	39	9	16	7	2.5
Total, Card VIII	87	55	22	23	1	.3
Total, Card IX	52	63	13	26	13	3.8
Total, Card X	179	55	45	23	22	5.6

Summary and conclusions:

The present report consists of an analysis of the relation between the individual and the group Rorschach, wherein the records of one hundred college students taken under individual conditions were compared with the records of an equated group of one hundred subjects in the group situation. With our present knowledge of the relation between the two tests, generalization concerning these results must be made with extreme caution. At least two factors, the subjects used and the nature of the inquiry, might make a vital difference in the similarities and differences obtained in comparing these two test situations. In our case, the subjects employed were male college students, averaging a little more than nineteen years in age, stemming mainly from a lower middle class background, and consisting essentially of individuals born in this country of parents who were born in Europe.

A minimum inquiry was employed in the group test. The system of recording responses under determinant headings in the inquiry as introduced by Harrower-Erickson(5) was not used. Subjects were asked to give more information particularly about factors in the slides which influenced their responses, and were urged to elaborate on their briefer answers[1]. The normal inquiry was utilized in the individual test.

1. The checking system of Harrower-Erickson, when employed, is of course not used mechanically. Rather it is usually employed as supplementary evidence in determining judgments about the appropriate scoring.

Our subjects produced markedly fewer responses in the group test than in the individual test. The reverse patterning has been reported by Munroe(13) on a group of college students differing radically from our subjects in sex and socio-economic background. Despite the large difference in the number of responses, a number of significant similarities between the two tests were found.

1. The absolute number of whole answers is virtually identical in the two situations. This identity is produced largely by the tendency on the part of the subjects to give the bulk of their whole responses in the first two responses made to a card. This tendency is stronger in the group test than in the individual and is associated with the greater tendency to give popular and simple whole responses in the group situation. There is, correspondingly, a decrease in the relative frequency with which the normal and rare details are utilized in the group test.

2. The absolute level of human movement responses is not significantly different in the two situations. An analysis of the association of human movement responses with the various location areas indicated that a far greater proportion of these responses are to be found in whole responses in the group test than in the individual test. This again was taken as an indication of the greater primacy of the whole response in the group test. It was felt that the nature of the perceptual and attitudinal fields to be found in the two situations should be explored more directly.

3. The proportional relations of the various color responses to each other is virtually the same in the two situations.

Differences between the two tests centered about the form percentage, which was higher for the group than for the individual test. This difference was shown to be a function of a number of factors.

1. The absolute number of animal movement responses as well as the relative number is much less in the group than in the individual situation. It was felt that this reduction was produced primarily by the lesser degree of impressiveness that animal movement has for the individual as compared to human movement. In a sense, this makes the animal movement responses spontaneously recorded by the individual more significant.

2. The shading responses were reduced both absolutely and relatively in the group test. For the Fc variety of responses the difference may have been largely a function of the inadequacy of the inquiry that we employed. The diminution in k and K responses seems to be due to differences in the perceptual situation. The proportion of FK responses is about the same in the two situations.

The relative proportion of color responses to total responses was about the same in the two situations. The absolute level was lower in the group test. Further analysis helped to clarify these results.

1. The sums of the absolute number of color responses made to cards II, III and IX were identical in the two situations.

2. The chief discrepancy was produced by differential reactions to card X. It was found that (a) more than twice as many responses were made to Card X in the individual test than in the group test;

(b) Almost fifty percent of the color determinants in the indi-

vidual test originate from card X as contrasted to less than twenty-five percent in the group test.

(c) The primary factor accounting for differences in the sum of color in the two tests is the enormously increased number of responses given to card X. Some color responses may have been lost through inadequate inquiry in the group test but that could not have been nearly as important a factor as the difference in response level.

(d) On the other hand, a relatively isolated color area such as the center red in card III stood out more in the group situation and was given more frequently as an FC response in the group test.

Because of the projected use of the group Rorschach test as a screening test, it is valuable to determine the relative incidence of various Rorschach "signs" of adjustment and maladjustment in the two tests. The results found here are very promising.

1. Many important signs do not occur with significantly greater frequency in one test than in the other.

2. Perhaps the only major signs which significantly distinguish the two tests are the negative sign, FC equal to zero or one, which is found more frequently in the group test, and the sign FM/M greater than two. The latter sign, because of the greater FM in the individual test, is to be found, as expected, more frequently in the individual than in the group test.

3. For subjects of the kind employed here we would suggest an alteration of the FC sign to FC equal to zero. In that case, we find that the critical ratio between the two tests does not indicate a significant difference.

4. For our subjects, at any rate, we feel that the number of responses below a certain minimum cannot be taken as an adequate sign of maladjustment in the group test.

5. Over-all judgments of color and shading shock do not differ markedly from each other in the two tests. We feel, however, that the problem of the relation of color and shading shock in the two situations needs more clarification.

These results indicate rather small differences between the two tests when all the factors are considered. The relationship between the two tests with respect to a sign approach would indicate the feasibility of the employment of the group test for screening purposes.

BIBLIOGRAPHY

1. Beckman, R.O. A scale for gauging occupational rank. Personnel J., 1934-35, 13, 225-233.

2. Brosin, H.W. and Fromm, E.O. Rorschach and color blindness. Rorschach Res. Exch., 1940, 4, 39-70.

3. Davidson, H.H. The influence of economic background on the personality of very bright children. N.Y.: Kings Crown Press, 1942.

4. Hallowell, A.I. Acculturation processes and personality changes as indicated by the Rorschach technique. Rorschach Res. Exch., 1942, 6, 42-50.

5. Harrower-Erickson, M.R. Directions for administration of the group Rorschach test. Rorschach Res. Exch., 1941, 5, 145-153.

6. ---------- The value and the limitations of the neurotic signs. Paper read at the 1942 meeting of the Eastern Psychological Association.

7. ---------- and Steiner, M.E. Modification of the Rorschach method for use as a group test. Rorschach Res. Exch., 1941, 5, 130-144.

8. Hertzman, M. and Kay, L.W. Rorschach anxiety patterns. In preparation.

9. Hertzman, M. and Margulies, H. Developmental changes as reflected in Rorschach test responses. J. genet. Psychol., in press.

10. Klopfer, B. and Kelley, D.M. The Rorschach technique. Yonkers: World Book Co., 1942.

11. Miale, F.R. and Harrower-Erickson, M.R. Personality structure in the psychoneuroses. Rorschach Res. Exch., 1940, 4, 71-74.

12. Munroe, R. Inspection technique. Rorschach Res. Exch., 1941, 5, 166-191.

13. ---------- The group method with college students. Paper read at the 1942 meeting of the Rorschach Institute.

14. Vernon, P.E. The Rorschach ink-blot test. Brit. J. Med. Psychol., 1933, 13, 89-118, 179-200, 271-291.

THE VALUE AND LIMITATIONS OF THE SO-CALLED "NEUROTIC SIGNS"

M.R. Harrower-Erickson, Ph.D.*

In a preliminary study, Personality Structure in the Psychoneuroses(5) nine so-called "neurotic signs" were isolated as characteristic of the Rorschach records of 43 neurotic patients, and these same signs looked for in the records of a small number of normal, non-clinical control subjects. A significant difference in the incidence of these signs was shown to exist, there being an average of 6.5 signs per record in the neurotic group and an average of 1.5 signs in the records of that particular group of controls.

This study was obviously incomplete for several reasons. The group of normal subjects was far too small for valid control. It was, moreover, too homogeneous a group. There was also the question, as has been raised by Ross(8) as to whether the 43 neurotic patients were a sufficiently representative clinical group, or whether in order to isolate certain features clearly there had not been some selective principle involved.

The present study, conducted over a period of two years has attempted a more thorough investigation of these signs. The records of 385 control subjects from various walks of life, age levels, and intelligence have been used. Moreover, in order to be sure that no selective principle was involved in the choice of neurotic patients 100 consecutive cases were studied. These 100 patients were referred to the experimenter in the capacity of clinical psychologist at the Montreal Neurological Institute with some such question as: "Are there psychogenic factors involved in this case?" In other words these patients had all presented symptoms for which no adequate organic cause had been found at the time. A serious question had arisen in the mind of the referring physician, therefore, as to whether or not the patient's trouble was of neurotic origin. At the time of referring the patient, however, no final diagnosis had been made.

In some cases no diagnosis was reached for months, even a year. The Rorschach report, therefore, was turned in, the diagnosis on the basis of personality made, and the number of neurotic signs recorded before a final diagnosis was reached.

When at the end of two years all diagnoses were available, it was found that 26 of these 100 patients had been cleared of the neurotic "stigma", for, on further investigation some organic condition had been found; for example, a small neuroma on the arm was found to be responsible for pain which had been previously considered as psychogenic.

Twenty other patients were finally diagnosed as both neurotic and somatic cases; that is, while there was a genuine belief that the individual was neurotic, some organic defect had also been found. (Such defects varied in severity from dental caries to a spinal cord tumor.) There remained, therefore, 54 patients with a disturbance on a purely psychogenic basis, 54 who were unquestionably psychoneurotic.

Two of the original "neurotic signs" were slightly modified before this analysis was made. The sign A% originally given to records with over 50% animal responses was also given for over 50% anatomical responses. The sign FC originally given when 1 FC was present was now given only when no FC

* University of Wisconsin

responses appeared in the record. The other signs for this study remained the same; that is, R under 25, only 1 M, FM greater than M, color shock, shading shock, F over 50% and failure.

Four hundred and fifty-nine records; the neurotics and the various control groups, were analyzed from the point of view of these signs, those with 5 or more signs being put on the black list.

The following table indicates the percentage of cases falling into this category in the various groups.

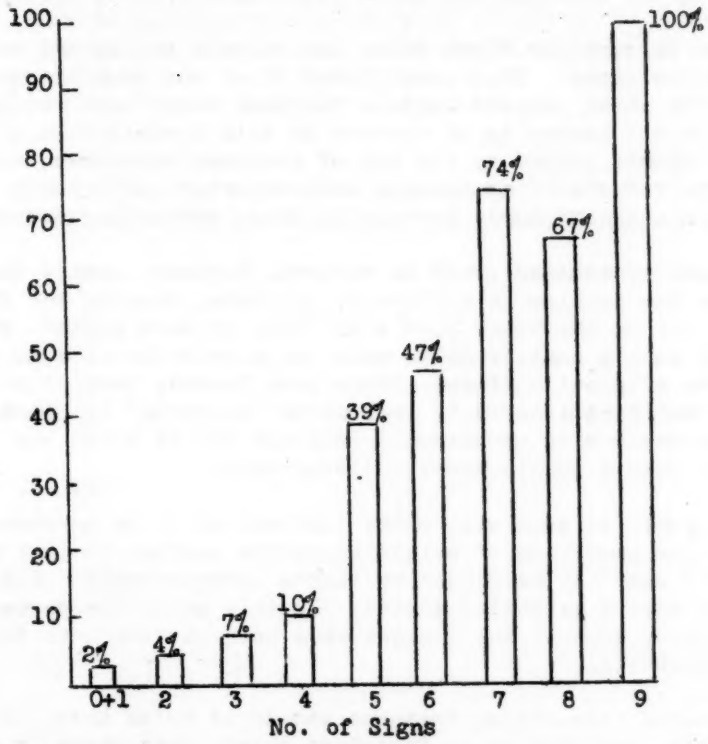
No.	Classification	% with 5 or more "neurotic signs"
54	Neurotics	85
20	Neurotics with somatic disturbances	65
26	Somatic disturbances only	15
108	College students, male	5
46	College students, female	11
40	Nurses in training	5
44	Aviation cadets	16
40	Superior adults	5
41	Convicts (I.Q. range 77-141)	27
40	Orderlies in R.C.A.M.C. (C grade)	38
385	Controls	15
74	Neurotics	80

The figures to the left refer to the number of subjects in each group; the figures to the right, the percentage of subjects in that group who showed 5 or more of these signs. The last two lines epitomize the results, for of the 385 controls, 15% showed 5 or more signs while of the 74 neurotics (that is, all neurotic personalities regardless of the presence of somatic symptoms) 80% showed 5 or more signs. It is very clear, therefore, that even between the worst group of normals, the (orderlies) and the neurotics, there is a striking difference in the incidence of records with 5 or more signs.

Figure I will perhaps serve to show this discrepancy even more clearly. In this we have considered as a unit all records, regardless of which group they came from, which showed the same number of signs. In the group having 0 or 1 sign (taken together because one sign alone gives absolutely no detrimental flavor to a record) we find 162 records. Of these only 2% are neurotic individuals. There are 41 cases where 4 signs appear, and 41 cases where 5 signs appear. In the 4 sign group there are 10% neurotics, but in the 5 sign group 39% are neurotics, nearly four times as many - an indication that this is an appropriate dividing line. Of the cases who showed 9 signs, all, or 100% are neurotic individuals.

FIGURE I

PERCENT OF NEUROTICS AMONG INDIVIDUALS
HAVING VARIOUS NUMBERS OF SIGNS



The value of these signs for differential diagnosis has been proved I think insofar as this particular group of patients is concerned. On the basis of the distribution of these signs alone it was possible to pick up 80% of the neurotic patients, and to pronounce as not neurotic 85% of those who subsequently turned out to have an organic cause for their symptoms.

There is a further advantage to such a set of signs. It is possible to have them recorded from scored records by persons whose Rorschach training is only partially completed, who could not be entrusted with a differential diagnosis unless certain objective landmarks could be followed.

Moreover, these signs have proved of unexpected value in the control group which has been most exhaustively studied - the 108 male students. The 5% who showed 5 or more signs here have quite recently confirmed our suspicions as to their possible maladjustment.

One of the present limitations of the method of judging by signs alone is the fact that not all types of neurotic records show up equally clearly in terms of the signs, for example the obviously compulsive type of Rorschach record with 100 responses, 95% of which are F. Such a record, provided it

includes 2 M's, a single FM, and 1 FC, which is not unusual, escapes the signs R, M, FM, and FC, and since such individuals rarely show CS or SS they must be placed in the 2 or at most 3 sign group.

A further limitation, one may say, is the failure of the signs to catch that 20% of the neurotic patients who do not show five or more signs. Although very few clinical procedures can claim 100% accuracy, it is none the less worthwhile to consider why these particular records escaped detection.

Let us consider first those individuals who showed no signs at all, one sign and two signs. This constituted 6% of our neurotic group. Here we have to ask did these records contain features which were recognizably bad but which just did not happen to be covered by this distribution of signs, or were they records which, judged by any set of accepted standards, were satisfactory records or the records of apparently well-adjusted individuals. The last alternative is unquestionably correct in these particular cases.

There is another group of records, however, namely those with 3 and 4 signs where the problem is different, for here, despite the fact that they could not be put on the black list with "five or more signs", the records were frequently of such a quality as to make one suspicious of some psychogenic factors in the clinical picture. There were frankly borderline cases, but if the standard had been lowered to include as "neurotic" all those with 4 or more signs we would have erroneously included 25% of those who subsequently transpired to have a purely somatic disturbance.

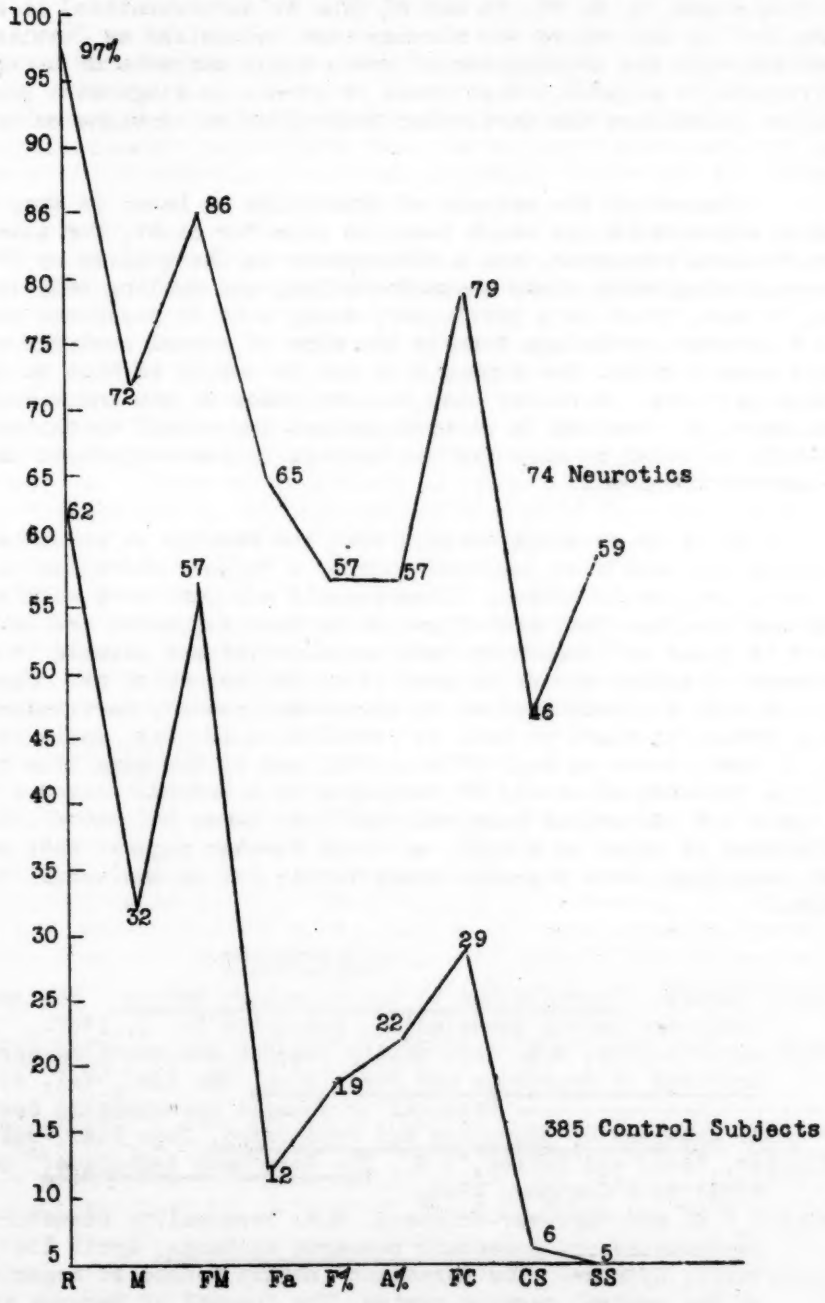
In order to deal with these limitations it is necessary to include with these signs some kind of weighting device similar to that suggested by the writer (3) and that developed by Munroe independently. Figure 2 gives the basis for such a weighting device. In this table the percentages of individuals showing each of the 9 signs have been plotted both for the neurotic and for the controls.

Several interesting features should be noted here. First, it can be readily seen, and this is an important point, that there is nothing pathognomonic to a neurotic record in any single sign. All signs are found in the records of normal or non-clinical subjects, but to a lesser degree. Second, there are three points on this curve where the more or less constant discrepancy or gap between the normals and neurotics becomes more marked, that is, where the difference between the percentages increases sharply. They are at failure, FC, and shading shock.

In terms of the greater incidence of these three signs in the records of neurotic patients, it is suggested that they are more likely to be indicative of neurotic personalities and should therefore receive a heavier weighting, let us say, three points each. On this same principle the signs M and CS would receive two points; F%, A%, and R, 1 point; and FM greater than M, .5. Two patients, therefore, each with four signs, might make a very different score or neurotic index when evaluated with the weighted signs.

FIGURE II

PERCENTAGE OF INCIDENCE OF SIGNS IN NEUROTIC AND CONTROL GROUPS



In conclusion we may discuss one other point. A question has often arisen as to what extent these signs can be used to differentiate the neurotic record from the psychotic or organic. Or, put in another way, is it not possible to find as many as 5 signs in the "typical organic record", and would not a group of psychotics show more individuals who fell in the "five or more" category than do normal non-clinical controls? It is certainly possible to find five signs, R, M, F%, Fa and A% (due to perseveration) in a typical organic record, but if the record has already been recognized as "typical" either by comparison with the psychograms of brain tumor patients or by the high incidence of Piotrowski's signs (2,6) then there is surely no diagnostic problem and it is pointless to utilize the particular constellation of signs we are discussing here.

Concerning the records of psychotics we have, in many cases, outstanding characteristics which leave no room for doubt, for example, contamination, bizarre responses, and a discrepancy in the quality of F's. (1,4,7) However, disregarding these characteristics, and dealing only in terms of the signs, we have found in a preliminary study with 30 psychotic patients that while a greater percentage than in the case of normal controls will be shown to have over 5 signs, the number will not be nearly so high as in a group of neurotic patients. Moreover when the incidence of the individual signs shown in the psychotic records is plotted against the normal or the neurotic, the curve will be found to have its own pattern in contradistinction to that of the neurotic or normal.

It is by no means certain that the results which we have obtained here could not have been improved upon by a further variation in the signs which were originally chosen. Consequently our last word will be one which emphasizes the fact that such signs as we have suggested are in no way final. Since R is found so frequently both in neurotics and normals it may be better to discard it altogether or to drop it to 12 instead of 25. Since FM greater than M is also a common feature of the normal record, particularly in the college group, it might be well to establish a critical ratio in the nature of twice or three times as many FM's as M's, and at the same time to include under this sign the absence of all FM responses in a record. Since a record may have just under 50% anatomical responses and just under 50% animal, and yet not score either of these as a sign, we would further suggest that anatomy plus animal responses, when together constituting 65% of the total, be accorded the A% sign.

BIBLIOGRAPHY

1. Beck, Samuel. Introduction to the Rorschach Method. The American Orthopsychiatric Association, Monograph No. 1, 1937.
2. Harrower-Erickson, M.R. Personality changes accompanying cerebral lesions. Archives of Neurology and Psychiatry, May 1940, Vol. 43, pp.859-890.
3. ---------- Personality changes accompanying cerebral lesions. II Archives of Neurology and Psychiatry, June 1940, vol. 43, pp.1081-1107.
4. Klopfer, Bruno and Kelley, D.M. The Rorschach technique. New York: World Book Company, 1942.
5. Miale, F.R. and Harrower-Erickson, M.R. Personality structure in the psychoneuroses. Rorschach Research Exchange, April 1940, vol. 4.
6. Piotrowski, Zygmunt. The Rorschach inkblot method in organic disturbances of the central nervous system. The Journal of Nervous and Mental Disease, vol. 86, no. 5, Nov. 1937.
7. Rickers-Ovisiankina, Maria. The Rorschach test as applied to normal and schizophrenic subjects. The British Journal of Medical Psychology, 1938, vol. 17, part 2, pp. 227-257.
8. Ross, W.D. The contribution of the Rorschach method to clinical diagnosis. Journal of Mental Science, July 1941.

NOTES ON RORSCHACH "SIGNS" IN DIAGNOSIS AND RESEARCH

W. D. Ross, M.D.*

The preceding report by Harrower-Erickson brings up again certain questions previously raised in the Rorschach Research Exchange(1). This latest check-up on the incidence of the "neurotic signs" shows a higher correlation with clinically recognized neurotic features than was reported previously on a wide range of patients and normals(2). It seems desirable to discuss this apparent difference.

In the first place Harrower-Erickson's total series is a most commendable one, particularly for the comparison between a wide range of normals and a large group of psychoneurotics. The definite break between the occurrence of four and that of five signs in relation to the presence of neurotic features is a striking substantiation of the choice of five or more of the signs as an indication of abnormality. Harrower-Erickson's wider collection of healthy individuals indicates that the group of soldiers used as one of the control groups in the previous report(2) was even more of a special group than was thought at the time of reporting. Harrower-Erickson's new soldier group with only 38% of 40 men showing five or more signs is significantly lower in these signs than the previous soldier group with 64% of 53 men; nevertheless it ranks higher in these signs than her group of Sing Sing inmates. The difference between the two soldier groups may be the result of the order in which the men, all from the same unit of the R.C.A.M.C., were supplied to the two examiners. H-E, examining first, may have received more typical average orderlies, and D.R., examining after certain officers began to take more interest in the testing procedure, may have included more individuals whose competence was in question (see (2) p.334). Whatever the explanation of these differences, the principle remains the same, that these signs represent features which, although they do not occur in high incidence in most samples of non-neurotic individuals, are found to an appreciable extent in people who are not clinically psychoneurotic.

It is of secondary importance whether they are called "neurotic signs" or signs of personality insecurity. What does matter, however, is the significance which a clinician can place upon a report of their presence in a patient whose illness provides a diagnostic problem. As Kelley(3) emphasizes, clinical diagnosis is not made by the signs themselves. However, the weight which the clinician gives to the signs must be derived, not from a comparison of psychoneurotics with "normals", but from their incidence in various groups of hospital patients.

Harrower-Erickson is now modifying the criteria for the "neurotic signs" on the basis of her experience and according to a weighting system which should increase even further their correlation with manifest psychoneurosis. When the new signs are settled, reports on their incidence in various clinical diagnostic groups as used by different Rorschach workers should give the numerical expression of validity and reliability which will enable the clinician to give the number of these signs its proper weight in relation to other evidence in the case.

---

* Research Institute of Endocrinology
McGill University.

Another warning might be made in relation to the diagnostic expectation of Rorschach signs, and that is in regard to the diagnostic expectation for the personality picture as a whole. It may be trite to emphasize this, but some workers in the field of personality diagnosis at least give the appearance of believing that the personality of the patient is the chief factor in the development of a psychoneurosis. This viewpoint would appear to overlook the physiological and sociological factors which are always in operation upon that personality. No single testing method can assess these three spheres. A personality neurotic according to Rorschach criteria may have avoided manifest clinical psychoneurosis through a fortunate combination of other factors, while a relatively stable personality may develop a clinical psychoneurosis in the presence of other extenuating factors. Only by bearing this threefold approach in mind can one explain some apparent failures of the Rorschach method in differentiating between psychogenic and physiogenic illness.

One more point concerning research on "signs" should be emphasized. If these signs are to have universal application they must be defined unequivocally. Color shock and shading shock particularly require standardization. Color shock is defined differently by Miale and Harrower-Erickson(4), by Brosin and Fromm(5) and by Hertz(6). Shading shock is defined without precise designation of the cards involved. Miale and Harrower-Erickson undoubtedly mean cards IV and VI when they speak of "the two strongly shaded cards" but Hertz says "the shading cards, especially IV and VI", which leaves some leaway. There is some question as to whether it is the shading which produces the hesitation on VI in view of the possibility for phallic symbolism which the card offers to some subjects. A similar question might apply to the validity of lumping together hesitation and other deviations of performance on card II and cards VIII – X. Certainly a system of signs based on objective description, with a minimum of unexpressed assumptions concerning the mechanism of the sign, would satisfy better the demands of scientific accuracy.

When these qualifications for "signs" have been satisfied and the incidence of the signs in various diagnostic groups and by different examiners has been reported, the clinical value of the method will enhance considerably the present undbouted value of a personality description given by an experienced Rorschach worker. In addition, much light concerning the inter-relationships of psyche and soma in illness may be cast by a study of these objectively determined measures.

References:

1. Ross, W.D. "A contribution to the use of signs in the Rorschach method" - presented to the Annual Meeting of the Rorschach Institute, New York, April, 1941.
2. Ross, W.D. "The Contribution of the Rorschach Method to Clinical Diagnosis." J.Ment.Sci., 1941, vol.87, pp 331-348.
3. Klopfer, B. and Kelley, D.M. "The Rorschach Technique". World Book Co., Yonkers-on-Hudson, New York, 1942, p. 389.
4. Miale, F.R. and Harrower-Erickson, M.R. "Personality Structure in the Psychoneuroses", Rorschach Res. Exch., 1940, vol. 4, pp 71-74.
5. Brosin, H.W. and Fromm, E.O. "Rorschach and Color Blindness", Rorschach Res. Exch. 1940, vol. 4, pp 39-70.
6. Hertz, M.R. "The Scoring of the Rorschach Ink-Blot Method as Developed by the Brush Foundation". Rorschach Res. Exch. vol. VI, pp 16-27.

PROGNOSTIC DATA IN CHRONIC ALCOHOLISM

Otto Billig, M.D.*
D.J.Sullivan, M.D.**

Although the personality study of chronic alcoholism is a problem of much concern to psychiatrists and psychologists, there is little Rorschach data available. Since we started to collect our material Jastak(2) has published a study of 10 cases. Kelley and Barrera(3) approached the subject from a somewhat different angle in their paper on acute alcoholic intoxication.

I. The Material

We examined 40 alcoholics of varied educational and social backgrounds, ranging from those who had had only a few grades of grammar school education to university graduates, and from farm workers to physicians. They were of different ethnic extractions and came from different sections of the country, although the majority came from the south-east. There were 34 men and 6 women, ranging in age from 22 to 62 years. We were able to take detailed histories of 29 of the patients who were followed up for a year or more after their dismissal from the hospital. These subjects have been divided into three groups. Group I consists of patients who were admitted for the first time for chronic alcoholism to any hospital and have not been drinking at all since their dismissal. The patients in Group II have been admitted more than once and have been drinking again since their dismissal but have so far improved that they are able to carry on their regular work which they could not do before admission. Group III includes patients who started drinking soon after dismissal and who have not been able to resume any regular work or care for themselves. Most of them did not finish their treatment for one reason or another. We were not able to make follow-up studies of the remaining eleven cases (Group IV). These were men who have been repeatedly arrested for drunkenness and who showed symptoms and histories typical of chronic alcoholics. All except two (#31, #32) were arrested for "drunkenness, resistance while intoxicated, driving while intoxicated" while in their early 'twenties and have been arrested several times since. (The average is 5.) The other two are older (Case 31 is 36 years of age, case 32 is 47) and have both been arrested twice. This grouping into four categories, is, of course, arbitrary.

Although statistical summaries of Rorschach data tend to obscure the patterns of individual records, it is possible to extract common features for these 40 cases just as we find common factors in clinical descriptions. In their recent study Bowman and Jelline (1) define the alcohol addict as not homogeneous as far as character is concerned but with comparatively weak restraint, poor mental poise and stability. He meets difficulties in controlling his mood swings and wishes, is distractible and shows a lack of attention, paranoid tendencies, stubbornness and self-conceit. According to Strecker(8) and others, the alcoholic is ill at ease with his environment and has a deep urge to get satisfaction.

---

* Highland Hospital, Asheville, N.C.

** Duke University, Durham, N.C.

CHART I - RORSCHACH STATISTICS FOR EACH OF THE SUBJECTS

	Case #	R	W	W+	D	d	Dd	S	W%	W+%	D%	d%	Dd+S%	F%	k	K	FK	Fc	c	C'	M	FM	m	Fm	FC	F/C	CF	Cdes	Csym	C
	1	40	14	5	21	4	-	1	35	13	52	10	3	52	1	1	-	1	1	-	4	7	-	1	1	-	1	1	-
	2	33	6	3	20	7	-	-	18	9	61	21	-	55	-	-	-	1	1	-	3	5	-	-	5	-	-	-	-
GROUP	3	15	4	1	10	-	-	1	27	7	67	-	6	46	-	-	-	-	-	1	2	4	-	-	1	-	-	-	-
I	4	69	17	6	38	9	2	3	25	9	55	13	7	45	5	-	1	4	2	1	3	12	-	2	4	-	2	2	-
	5	30	8	1	17	5	-	-	27	3	56	17	-	63	2	-	-	-	-	-	1	3	-	1	2	-	2	-	-
	6	95	6	1	43	15	31	-	6	1	45	16	33	74	-	-	-	-	1	-	5	10	-	4	2	1	2	-	-
	7	20	7	2	12	-	-	1	35	10	60	-	5	65	-	-	-	-	1	-	1	1	-	-	-	-	4	-	-
	8	40	3	1	15	19	3	-	8	3	37	47	8	78	-	-	-	-	1	-	2	3	-	2	1	-	-	-	-
	9	35	12	5	16	4	1	2	34	14	46	11	9	40	1	-	-	2	1	1	4	3	-	2	4	-	1	2	-
	10	65	3	1	27	12	22	1	5	2	41	18	36	74	-	-	1	-	-	1	2	10	-	2	-	-	1	-	-
GROUP	11	49	7	2	27	7	5	3	14	4	55	14	17	65	1	-	-	-	2	1	3	5	-	-	-	-	3	1	-
II	12	40	14	3	20	4	2	-	35	8	50	10	5	62	1	-	-	-	2	-	4	2	-	-	4	-	2	-	-
	13	34	13	3	18	3	-	-	38	9	53	9	-	62	1	1	-	-	1	-	3	6	-	-	1	-	-	-	-
	14	72	9	4	35	14	11	3	13	6	49	19	19	65	-	1	-	-	1	-	3	8	1	3	7	-	1	-	-
	15	23	5	-	15	3	-	-	22	-	65	13	-	52	1	-	2	-	1	1	-	2	-	-	2	-	2	-	-
	16	16	3	1	9	2	1	1	19	6	56	12	13	75	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-
	17	105	7	3	44	30	20	4	7	3	42	28	23	61	2	-	1	2	1	3	9	10	-	4	3	-	-	-	-
	18	15	9	4	4	1	1	-	60	26	26	7	7	40	-	-	-	-	2	-	4	2	-	-	-	-	-	1	-
	19	65	5	1	25	13	19	3	8	2	38	20	34	69	2	3	-	2	-	-	4	3	1	-	2	-	2	-	-
	20	38	11	2	13	9	3	2	29	6	34	24	13	63	1	1	-	-	1	1	2	3	1	1	1	-	1	2	-
	21	14	8	-	4	2	-	-	57	-	29	14	-	57	1	1	-	-	1	-	-	2	-	-	-	-	-	1	-
	22	30	14	2	12	1	2	1	47	7	40	3	10	50	4	1	-	-	1	-	2	2	-	-	2	-	3	-	-
	23	46	10	2	20	11	2	3	22	4	43	24	11	74	1	-	-	-	2	1	1	5	-	-	2	-	-	-	-
GROUP	24	38	3	1	20	9	1	5	8	3	52	24	18	66	1	1	-	1	-	-	1	3	2	-	4	-	-	-	-
III	25	27	13	1	10	-	1	3	48	4	37	-	15	52	-	4	-	-	1	-	1	3	-	-	1	-	3	-	-
	26	25	6	2	16	2	1	-	24	8	64	8	4	60	-	-	-	-	1	-	4	3	-		-	-	1	-	-
	27	16	7	-	4	3	-	2	44	-	25	19	12	62	2	1	-	-	1	1	-	-	-	-	-	1	-	-	-
	28	20	8	1	6	5	1	-	40	5	30	25	5	65	1	-	-	-	-	-	2	1	-	-	1	-	1	1	-
	29	63	11	3	13	24	15	-	17	5	21	38	24	68	2	-	-	1	2	-	4	2	-	6	2	-	1	-	-
	30	20	2	-	3	5	7	3	10	-	15	25	50	80	-	-	-	-	-	1	1	2	-	-	-	-	-	-	-
	31	44	5	-	30	6	3	-	11	-	68	14	7	70	-	-	-	-	5	-	-	2	-	-	1	-	5	-	-
	32	12	5	2	6	1	-	-	42	17	50	8	-	50	-	-	-	-	1	-	2	1	-	-	-	-	2	-	-
	33	9	2	-	2	1	3	1	22	-	22	11	45	67	-	-	-	-	-	-	-	2	-	-	-	-	1	-	-
GROUP	34	20	2	-	10	6	-	2	10	-	50	30	10	85	-	-	-	-	1	-	-	1	-	-	-	-	1	-	-
IV	35	10	7	-	1	2	-	-	70	-	10	20	-	70	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-
	36	20	8	-	11	1	-	-	40	-	55	5	-	65	-	-	-	-	2	-	-	2	-	-	1	-	2	-	-
	37	15	4	2	4	4	1	2	26	13	27	27	20	67	-	-	-	-	-	-	2	-	-	-	-	-	1	-	-
	38	13	3	-	9	1	-	-	23	-	69	8	-	77	-	-	-	-	1	-	1	1	-	-	-	-	-	-	-
	39	20	3	1	7	4	5	1	15	5	35	20	30	70	-	-	-	1	1	1	1	1	-	1	-	-	-	-	-
	40	11	2	-	4	4	1	-	19	-	36	36	9	91	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-

CHART I - Continued

CASE #	(FM+m) : C	VIII+IX+X : (H+A)	(H+A) : (A+Ad)	Color	Shading	Refusal	Clinical
1	5 : 1	1 : 3	3 : 1				
2	3 : 0	0 : 3	3 : 0				
3	2 : 0	0 : 2	2 : 0				
4	5 : 2	1 : 3	3 : 1				
5	1 : 0	0 : 1	1 : 0				
6	5 : 1	1 : 3	3 : 1				
7	1 : 0	0 : 1	1 : 0				
8	2 : 0	0 : 2	2 : 0				
9	4 : 1	1 : 3	3 : 1				
10	2 : 0	0 : 2	2 : 0				
11	3 : 1	1 : 3	3 : 1				
12	4 : 0	0 : 4	4 : 0				
13	3 : 0	0 : 3	3 : 0				
14	3 : 1	1 : 3	3 : 1				
15	0 : 0	0 : 0	0 : 0				
16	1 : 0	0 : 1	1 : 0				
17	9 : 1	1 : 3	3 : 1				
18	4 : 0	0 : 4	4 : 0				
19	4 : 1	1 : 3	3 : 1				
20	2 : 1	1 : 3	3 : 1				
21	0 : 0	0 : 0	0 : 0				
22	2 : 0	0 : 2	2 : 0				
23	1 : 1	1 : 3	3 : 1				
24	1 : 2	2 : 3	3 : 2				
25	1 : 0	0 : 1	1 : 0				
26	4 : 0	0 : 4	4 : 0				
27	0 : 1	1 : 3	3 : 1				
28	2 : 1	1 : 3	3 : 1				
29	4 : 2	2 : 3	3 : 2				
30	1 : 0	0 : 1	1 : 0				
31	0 : 1	1 : 3	3 : 1				
32	2 : 0	0 : 2	2 : 0				
33	0 : 0	0 : 0	0 : 0				
34	1 : 0	0 : 1	1 : 0				
35	0 : 0	0 : 0	0 : 0				
36	2 : 1	1 : 3	3 : 1				
37	2 : 0	0 : 2	2 : 0				
38	1 : 0	0 : 1	1 : 0				
39	1 : 1	1 : 3	3 : 1				
40	1 : 0	0 : 1	1 : 0				

38	13	3	-	9	1			15	5	35	20	30	70	-	-	-	1	1	1	1	1	-	1						
39	20	3	1	7	4	5	1	15	5	35	20	30	70	-	-	-	1	1	1	1	1	-	-						
40	11	2	-	4	4	1	-	19	-	36	36	9	91	-	-	-	-	-	-	-	1	-	-						

CHART I - Continued

CASE #	M:ΣC	(FM+m): (Fc+C+C')	VIII+IX+X / R %	W:M	W+:M	(H+A) (Hd+Ad)	H:Hd	P	Or	A%	At	pl	Sex	Blood	Color Shock	Shading Shock	Refusal of any Cards	Clinical Prognosis
1	4:2½	7:2	45	14:4	5:4	17:4	4:2	6	1	37	1	1	-	-	-	✓	-	+
2	3:2½	5:2	42	6:3	3:3	18:8	2:3	6	-	64	2	1	-	-	✓	-	-	+
3	2:½	4:1	40	4:2	1:2	7:5	2:2	4	-	53	1	-	-	-	-	✓	-	+
4	3:6	12:7	36	17:3	6:3	25:13	3:4	7	4	45	6	2	-	-	✓	-	-	+
5	1:3	3:0	40	8:1	1:1	11:1	1:1	4	1	33	16	-	-	-	-	✓	-	+
6	5:3½	10:1	25	6:5	1:5	29:58	6:33	5	4	51	1	3	-	-	-	✓	-	±
7	1:4	1:1	40	7:1	2:1	6:7	1:2	4	-	50	2	2	1	-	-	✓	-	-
8	2:½	3:1	45	3:2	1:2	20:20	2:16	5	-	55	-	-	-	-	✓	✓	-	±
9	4:5	3:4	34	12:4	5:4	12:3	3:1	6	4	31	3	2	-	-	-	-	-	±
10	2:1	10:1	32	3:2	1:2	30:28	3:17	5	2	58	1	2	-	-	-	-	-	(±)
11	3:4	5:3	55	7:3	2:3	16:12	3:9	4	3	33	2	1	-	-	✓	-	-	±
12	4:4	2:2	25	14:4	3:4	11:17	4:1	6	-	42	9	4	-	-	-	-	-	+
13	3:½	6:1	41	13:3	3:3	16:11	3:4	6	1	59	-	-	-	-	✓	✓	-	±
14	3:4½	9:1	29	9:3	4:3	29:28	5:11	8	3	57	3	2	-	-	-	-	-	+
15	0:3	2:2	39	5:0	0:0	9:8	0:4	4	-	57	1	2	-	-	-	✓	-	±
16	1:0	3:0	44	3:1	1:1	6:7	1:4	3	1	50	1	-	-	-	-	✓	-	±
17	9:1½	10:6	34	7:9	3:9	37:38	13:23	10	11	37	3	2	-	-	✓	-	-	+
18	4:1	2:2	26	9:4	4:4	9:2	4:2	5	1	33	1	-	-	-	✓	-	-	±
19	4:3	4:2	45	5:4	1:4	9:21	3:14	5	5	20	3	2	-	-	✓	✓	-	--
20	2:3½	4:2	42	10:2	2:2	12:11	2:5	4	1	42	2	1	-	-	✓	✓	-	--
21	0:1	2:1	21	8:0	0:0	5:1	1:0	4	-	36	4	-	-	-	✓	✓	-	--
22	2:4	2:1	37	14:2	2:2	12:1	3:1	5	-	37	10	-	-	2	✓	✓	-	---
23	1:1	5:3	35	10:1	2:1	17:16	2:7	5	1	52	3	2	1	-	✓	✓	-	--
24	1:2	6:1	26	3:1	1:1	16:7	2:6	4	-	39	1	4	2	-	✓	✓	-	---
25	1:3	3:1	22	13:1	1:1	9:0	1:0	5	-	30	4	2	-	-	✓	✓	-	---
26	4:1	3:1	36	6:4	2:4	13:9	6:7	6	1	36	-	-	-	-	✓	✓	-	---
27	0:½	0:2	31	7:0	0:0	4:3	0:1	4	-	37	-	1	-	-	✓	✓	-	--
28	2:2½	1:0	25	3:2	1:2	4:5	2:0	4	1	35	3	-	2	-	✓	✓	-	---
29	4:2	2:3	30	11:4	3:4	15:34	4:23	4	2	35	2	1	-	-	✓	✓	-	--
30	1:0	2:1	35	2:1	0:1	6:5	4:5	1	2	10	1	-	-	-	✓	-	-	
31	0:5½	2:5	34	5:0	0:0	10:20	0:7	5	-	52	5	-	2	-	✓	✓	-	
32	2:2	1:1	33	5:2	2:2	7:1	3:1	3	-	33	1	2	-	-	✓	✓	-	
33	0:1	2:0	33	2:0	0:0	4:3	2:2	2	-	33	-	1	-	-	✓	-	✓	
34	0:1	1:1	35	2:0	0:0	3:5	0:2	3	-	30	2	3	3	-	✓	-	-	
35	0:0	1:0	20	7:0	0:0	5:0	0:0	3	-	50	1	-	-	-	-	-	✓	
36	0:2½	2:2	45	8:0	0:0	9:4	1:1	5	-	55	3	-	-	-	✓	✓	-	
37	2:4	0:0	27	2:2	2:2	5:0	4:0	2	-	7	-	4	-	-	✓	✓	-	
38	1:0	1:1	31	3:1	0:1	6:3	0:3	4	1	77	1	-	2	-	✓	-	-	
39	1:0	1:2	30	3:1	1:1	9:4	3:1	6	-	45	-	-	2	-	✓	✓	✓	
40	0:0	1:0	27	2:0	0:0	4:6	0:5	1	-	36	-	-	-	-	-	✓	✓	

II. The Results

Complete Rorschach statistics for our 40 cases are presented in Chart I.

1. The Erlebnistypus

On the basis of clinical descriptions we expect to find that tension will be an outstanding characteristic of the record of the chronic drinker. According to Klopfer(4) the basic personality configuration is described by the relation of (VIII+IX+X):(R) to (FM+m):(Fc+c+C') and to M:ΣC. Opposite tendencies within these three factors would express tension within the different levels of the personality structure. Thirty-eight of the 40 cases show such distortion. Taking the ratio (VIII+IX+X):(R) as the point of departure, we find among the patients whom we were able to observe for a year after dismissal (Groups I,II,III) that 80% of those with good prognosis have unused extraversial capacities as against 17% of those with poor prognosis. In none of those with good prognosis is (VIII+IX+X):(R) less than 30%, but almost in half of those with poor prognosis and in nearly a third of those in the intermediate group (II).

The larger percent in (VIII+IX+X):(R) in prognostically favorable groups might also be a function of the greater capacity of these individuals to cope with objective reality. This is also consistent with the fact that the more favorable group had a greater D%. An examination of the frequency of responses to card X, which lends itself to D, showed that the members of the diagnostically more favorable group take greater advantage of the opportunity to produce D's than do those whose prognosis is less favorable.

In 65% of the entire group (and in 76% of the hospital group), (FM+m) is larger than (Fc+c+C'). According to Kelley and Barrera (3) "this quotient represents the conscious control of an individual in attempting to stave off an increasing trend toward environmental reactivity if the (FM+m) is augmented, and a relaxation of such control if the (Fc+c+C') side is increased. It would seem, therefore, justified to consider these factors as indicative of the attempts of an individual to regulate emotional responses to the environment". The majority of our patients appear to be making a "conscious effort" to "stave off environmental reactivity". Those who do not show this conscious effort have no unused extraversial capacities; they seem to attempt, not always successfully, to enforce a secondary extraversion. The year of observation showed that in all cases in which (FM+m) is <u>not</u> larger than (Fc+c+C') the prognosis was medium or poor. However, not all cases in which the (FM+m) factor was greater proved to be in good condition at the end of the period. This seems to suggest that patients with a tendency to yield in their emotional responses to their environment depend more on alcohol than do others. Resistance to influences from without is not a sufficient protection against alcohol addiction which is a complex mechanism.

We find definite differences between the prognostically favorable and unfavorable groups with reference to the manifested "Erlebnistypus" (M:ΣC). We pointed out that with reference to the ratio (VIII+IX+X):(R) the majority of the prognostically favorable group manifested extraversial capacities as indicated by that measure. The relation is reversed in the case of M:ΣC. We find more cases of manifested introversion in the prognostically favorable group and fewer in the unfavorable group (60% to 27%). This seems to be mostly due to a coartation of the unfavorable cases. Rorschach (7) describes coartation as an extremely limited expression of both M and ΣC. In the prognostically unfavorable group coartation is accompanied by rigid constriction (F%).

If we would construct from our observations the basic personality structure of an alcoholic with good prognosis, we can expect him to have unused extraversial capacities and consciously attempting to withdraw from environmental influences. In his actual adaptation (M:ΣC) he shows a mobilization of his inner forces with slight constriction (F% slightly less than 50).

The average alcoholic with fair prognosis like most of our patients tries consciously to withdraw from the environment. However, this tendency is less pronounced in this group; some of the patients are more indifferent to the environment, only one consciously attempting to enforce extraverted relations. The manifested personality of this group is preferably introverted with high constriction, what may be called "constricted introversion". The expression of extraversive and introversive factors is coarted in most cases.

The alcohol addict of poor prognosis has no unused extraversial capacities. He also shows less tendencies to withdraw from the environment. In most cases he manifests a "constricted extraversion", however the constriction is emphasized more than in the other groups. They show more coarted cases. In cases of extraversion this is of more impulsive nature (increase of CF).

2. The Mental Approach

The "Manner of approach" shows significant changes. Only 10 cases have between 20 and 30% W responses. The difference between the groups is more evident for W+ than for W. All cases in group I have W+, 12 of 13 in group II, 9 of 11 in group III, and only 3 of 11 in group IV. The quality of W responses is impoverished, as W+/W% indicates. The poorer the prognosis, the more vague and non-committal responses (e.g., "a picture of anatomy", "X-ray", "butterfly", etc.), were produced. Although we do not expect all W's to be of high quality even in highly intelligent "normals", only one of our cases has slightly more than half of the W's of good quality. In 10 cases one-third to one-half of the W's are of good quality. The majority (29 cases) showed less than one-third of good W's. To produce well integrated W's of high quality a satisfactory analysis and synthesis is necessary. A low W+% indicates that this process is disturbed in one way or another. The explanation may be neurological or psychological.

According to Wertheimer's (10) theory of conception, when we look upon an object, in our case upon the cards, sensory nerves are excited simultaneously. Centrally at the moment of excitation the inter-connecting cortical neurons short-circuit the excitation. Theoretically, the result would be an inclusive response answering the stimulation as a whole. This theoretical response, however, is modified by the personality structure of the individual, by the liberation and inhibition of the impulses according to this particular individual's personality structure. What is expressed as seen and what is suppressed depends on the individual personality, so that the individuality expresses itself specifically. Any tension within the personality will influence these unorganized, undirected stimuli and inhibit their equal distribution. Due to the inhibitions still within normal limits the process of directing and building up all the peripheral sensory stimuli into one common goal is interrupted before the whole card is interpreted, and only a detail of the whole is given as the usual answer. If the tension becomes neurotic and stronger than usual, then only a small detail of the whole blot is used, namely, Dd (rarely selected detail response). The patient often tries to overcome his inhibitions by means of building a composition response wherein apparently all stimuli are used, but it is not a genuine use, because the test person conceives only an approximate

outline, not sufficiently analyzed, some parts are crudely perceived, some are repressed. The missing parts are substituted with approximate filling out as the following well known example from physiology. Two objects (a cross and a circle) are located on a uniform background so that when the cross is fixed by vision the circle lies on the blind spot and disappears and its place is filled out by the uniform background. A somewhat similar situation is present in our test. Frequently, the approximate filling out is accomplished with an element of diffusion (k or K type). The results are responses like "X-ray", "clouds", etc. This process indicates a psychological mechanism of "covering up" in which the patient in his inner life realizes his defects and substitutes impersonal details for them but also develops anxiety. This procedure may explain the well-known symptom of the alcoholic, rationalization. Due to this mechanism of rationalization the personality satisfies its ambitions and at the same time it expresses the resistance to further investigation of the problems. It is this same resistance which makes a therapeutic approach difficult.

The D% data confirms these findings. The prognostically favorable group shows a slight over-emphasis of D%, while most of those in the unfavorable group show a low D%. The alcoholic of poor prognosis seems to have lost the "clear recognition for concrete facts" which is indicated by D.

A similar relation is shown by d (indicating a critical attitude without being far-fetched). Groups III and IV have the smallest number of cases with an average d% (10-20%). There is also an increasing number of Dd, the smallest proportion is in group I, increasing definitely in II and III. Antagonistic tendencies, expressed by the frequency of S, is also definitely increased in patients with poor prognosis.

In our chronic alcoholics F% appears increased. The constriction is particularly high in cases with poor prognosis. In groups III and IV constriction becomes extremely rigid at the same time that form level becomes more vague.

3. The Shading responses and other anxiety factors

The entire group shows a number of anxiety factors. Eighteen cases show k and 11 cases K; 8 cases have both K and k. Here, again, the patients with poor prognosis show particularly high frequency of these elements of diffusion. The exception is group IV where the highly rigid constriction probably does not allow for the manifestation of any factors other than crude form responses. "...these physical qualities (in k,K) are simply reflections of corresponding qualities of the inner life; haziness, fogginess created by what we may call free floating anxiety based on a bondage to the drive-dominated part of the personality"(4). This type of response results from a neurotic conflict in which the censorship tries to suppress primitive drives. The attempt to depersonalize the conflict results in its expression as anxiety. In 24 cases we found Hd larger than H, one of Rorschach's (7) anxiety factors. In 9 of the 24 cases the Hd are faces seen in tiny edge details. "The clinging to the edge details seems to indicate a fear to go deeply into anything", according to Klopfer(4), suggesting anxiety. Eighty percent of all the cases show anxiety in one way or another.

When an individual enlivens the shadings of the blots by combining them with form elements to build up a three-dimensional response (FK), he fulfills something creative. Although the creativity is somewhat restrained, "it indicates a very careful attitude to the promptings from within"(4): an attitude of introspection. Only 5 of the 40 chronic alcoholics were capable of this type of response. If the average alcoholic would be capable of this procedure,

drinking would be a less serious problem for him. None of the alcoholics of poor prognosis showed the ability to combine F with K, although almost all cases in group III show K alone.

Pure texture responses (c) express an undifferentiated contact sensation or better, sensuality without the ability to sublimate it into such self-protective performances as Fc would represent. Twenty-two cases show c, 5 both Fc and c, and only 2 have only Fc. The groups with poor prognosis have more cases with c and more cases in which c is larger than Fc.

The decrease of FK, indicating a lack of the ability of a refined sensitivity and reaction to promptings from within, might lead us to expect a decrease in M. In group I (good prognosis), only 1 out of the 5 subjects has 1 M or less. Patients with less good prognosis show a comparatively high number of M's also, although fewer than group I. The difference between group IV and the other patients probably depends far more on primary intellectual capacities. This group is made up of individuals of dull average intelligence. Kelley and Barrera (3) also found an unexpectedly high number of M. They explain this as indicative of an egocentric wishfulfillment and compare those findings with the increase of M in mild psychosis. Such wish-fulfillment is the ultimate goal of alcoholics. Frequently the M's show an enlivening of small unusual details (Dd). This would suggest that these patients avoid expressing their productive and creative capacities freely for constructive creation. In groups III and IV we found responses in which the form element was poor, indicating the rational thinking was damaged and wishful thinking was overwhelming intellectual control.

4. Productivity.

The ratio W:M indicates the relation between inner productivity and actual achievement. Only 5 of our cases show the desirable balance of 2W:1M. Individuals of group I are most capable of this. In most of the cases the W's outnumber by far the M's. When we recall the vague and non-committal level of many of the W's, we agree with the conclusion of Kelley and Barrera(3) that the genuine creative capacities of the problem alcoholic are usually limited and are used mostly for egocentric wishfulfillment. We find frequently M greater than W+, which would indicate preoccupation with inner life (centering around wishfulfillment), without the ability to use the productive capacities for actual creation. Consequently the factors indicating mental achievement (W+) are small.

Twenty-six cases showed more FM than M and 5 showed an equal number of both; only 9 had more M than FM. This would indicate a prevalence and manifestation of primitive tendencies in most of our patients in all groups. This is not surprising. Strecker(8) writes: "This urge (to drink) is a demand for repression to lower levels and levels of lessened responsibility, immaturity and finally, phantasy." A higher FM does not prevent favorable prognosis in cases which are otherwise favorable.

In a mature person M is larger than FM which, in turn, is larger than m. In our group 4 cases have m, but in only one do we find a "normal" ratio. The other three indicate an inner tension expressing serious conflict within the early personality organization. In addition to these three types of movement response Klopfer(4) separated F,m, indicating expressions of human figures. This type of response, like the enlivening of small unusual details, expresses a superior form of suppression of the inner life. We find this type of response mostly in group II suggesting, in connection with other data, that productive tendencies are more freely at the patient's disposal in group I, undergo modified suppression (F,m) in II and suffer rigid constriction in III and IV.

5. Emotional Control

An examination of the color responses shows that in 80% of all cases factors indicating impulsive emotional behavior are stronger than those expressing smooth adjustment to environmental influences. If we investigate emotional adjustment on Rorschach's (7) basis (2-3FC, 1-2CF, OC), we find that only 6 patients in the entire group show a satisfactory adjustment. Taking only the relation of FC to the sum of other color responses of group I (most favorable to treatment) we find more cases in which the "adjustment factors" are stronger than those indicating impulsivity. Group II is in a medium position. However, III and, particularly, IV are most impulsive in their emotional reaction. Miale and Erickson (15) found 81% in their neurotic group had 1 or no FC as compared with 20% in their control group. Our alcoholic group shows a definite increase in this percentage over the normals, the least in the prognostically favorable (40%) and the most (55% in III, 100% in IV) in the prognostically unfavorable cases.

6. Miscellaneous Factors

There is no outstanding change in popular responses. There is, however, a definite reduction in the number of original responses. Group III has relatively many O-.

There are comparatively many cases with a low A%. This would be in accordance with the rich imagination of the alcoholic but we must emphasize that it tends toward primitive wishfulfillment. Kelley and Barrera also found a lowered A%.

Half of all patients show a definite increase of anatomical responses. According to Rorschach (7) these responses in non-medical people "almost always represent an intelligence complex or hypochondriacal preoccupation, may be both". Many cases also show a primitive level in form of plants, sex and blood responses. The sex and blood responses, more emphasized in group IV, are indicative of primitive and aggressive tendencies. The increase of plant responses is of interest because we find this response particularly often in children between the ages of 6 and 8.

All these results show definite differences between cases of good and poor prognosis despite the fact that our cases are not a satisfactory cross-section of all types of drinkers as we deal most frequently with more serious cases who are committed on a non-voluntary basis.

III. Conclusions

1. In most of our patients FM is larger than M, which is comparatively high for the entire group. In accordance with Kelley and Barrera (3) we attribute this to the self-centered wishfulfillment of the chronic alcoholic. The increase of FM over M may be compared with Strecker's (8) definition that the urge for alcohol is a demand for regression to lower levels.

2. The absolute decrease in FC and the frequency with which FC is smaller than other indicators of emotional reaction confirm Bowman and Jellinek(1) statement that: "The chronic alcoholic shows a comparatively weak restraint, poor mental poise and stability, difficulties in controlling his mood swings and desires, combined with a lack of attention.

3. Almost all of them show more or less anxiety and tendencies to concern about their bodies (At%).

4. The increased W% allows us to infer that the alcoholic's ambitions are rather high but his actual achievements are limited (W+:M).

5. The small W+/W%, particularly in cases of poor prognosis, indicates the patient's resistance to the attempt of the therapist to penetrate the complex mechanism and, in our opinion, is of high prognostic value.

6. Only 5 cases show FK. The majority of the cases crudely sensualize their difficulties without being able to adapt themselves satisfactorily (c more than Fc).

7. Cases with poor prognosis show a reduction of the normal average D%, indicating a lack of understanding of everyday problems. The reduction or overemphasis of d% in such cases represents corresponding variations from a sound critical attitude.

8. Patients with good prognosis pay less attention to unusual or farfetched detail (Dd%) and show fewer antagonistic tendencies (S).

9. Reduced A% is indicative of rich imagination which is used to satisfy selfish and primitive wishes.

10. The values of (VIII+IX+X):(R) show unused extraversial capacities in group I and a reduction of extraverted tendencies in groups III and IV.

11. Regardless of prognosis, 65% attempt to withdraw from their usual environment (FM+m) more than (Fc+c+C'). A few try, without success, to enforce a secondary extraversion.

12. We believe that a sign approach, such as those used by Piotrowski (6) and Miale and Erickson (5) might give helpful indications as to the prognosis of alcoholics. Factors dealing with the manner of approach and F% appear to be more significant than such others as K)1, k)1, c)1, M(FM, FC=(1, FC(CF+C, (VIII+IX+X):(R) (30%, Hd) H, At) 1, W+(M. In our evaluation we gave these factors one point and the others (W+/W = 33.3%, D(50%, Dd+S)10%, F)60%) two points each. On this basis patients in group I show between 3 and 6 points, those in group III between 9 and 15. Two cases in group III show 8 points. Their poor prognosis is due to reasons not expressed in these factors. (See Chart II)

We wish to emphasize that these test results do not represent the actual prognosis. They merely show ability to respond to treatment.

CHART II

PRESENCE OF VARIOUS "SIGNS" IN EACH OF THE SUBJECTS

Case #	W+ / W = 33-1/3%	D<50%	Dd+5>10%	F>=60%	k>1	K>1	c>1	M<FM	Fc=<1	FC<(CF+C)	VIII+IX+X / R <30%	Hd>H	P'>1 5c+	At>1	W+<M
1	-	-	-	-	-	-	-	x	x	x	-	-	-	-	-
2	-	-	-	-	-	-	-	x	-	-	-	x	-	x	-
3	x	-	-	-	-	-	-	x	x	-	-	-	-	-	x
4	-	-	-	-	x	-	x	x	-	x	-	x	x	x	-
5	x	-	-	-	x	-	-	x	-	x	-	-	-	x	-
6	x	x	x	x	-	-	-	x	-	x	x	x	x	-	x
7	x	-	-	x	-	-	-	-	x	x	-	x	x	x	-
8	-	x	-	x	-	-	-	x	x	-	-	x	-	-	x
9	-	x	-	-	-	-	-	-	-	x	-	-	x	x	-
10	-	x	x	x	-	-	-	x	x	x	-	x	x	-	x
11	x	-	x	x	-	-	x	x	-	x	-	x	-	x	x
12	x	-	-	x	-	-	x	-	-	-	x	-	x	x	x
13	x	-	-	x	-	-	-	x	x	-	-	x	-	-	-
14	-	x	x	x	-	-	-	x	-	-	x	x	x	x	-
15	x	-	-	x	-	-	-	x	-	x	-	x	x	-	-
16	x	-	x	x	-	-	-	x	x	-	-	x	-	-	-
17	-	x	x	x	x	-	-	x	-	-	-	x	x	x	x
18	-	x	-	-	-	-	x	-	x	x	x	-	-	-	-
19	x	x	x	x	x	x	-	-	-	x	-	x	x	x	x
20	x	x	x	x	-	-	-	x	x	x	-	-	-	x	-
21	x	x	-	-	-	-	-	x	x	x	x	-	-	x	-
22	x	x	x	-	x	-	-	-	-	x	-	-	x	-	-
23	x	x	x	x	-	-	x	x	-	-	-	x	x	x	-
24	-	-	x	x	-	-	-	x	-	-	x	x	x	-	-
25	x	x	x	-	-	x	-	x	x	x	x	-	x	x	-
26	x	-	-	x	-	-	-	-	x	x	-	x	-	-	x
27	x	x	x	x	x	-	-	-	x	x	-	x	-	-	-
28	x	x	-	x	-	-	-	-	x	x	x	-	x	x	x
29	x	x	x	x	x	-	x	-	-	-	-	x	-	x	x
30	x	x	x	x	-	-	-	x	x	-	-	x	-	-	x
31	x	-	-	x	-	-	x	x	x	x	-	x	x	x	-
32	-	-	-	-	-	-	-	-	x	x	-	-	x	-	-
33	x	x	x	x	-	-	-	x	x	x	-	-	-	-	-
34	x	x	x	x	-	-	-	x	x	x	-	x	x	x	-
35	x	x	-	x	-	x	-	x	x	-	x	-	-	-	-
36	x	-	-	x	-	-	x	x	x	x	-	-	-	x	-
37	-	x	x	x	-	-	-	-	x	x	x	-	x	-	-
38	x	x	x	x	-	-	-	-	x	-	-	x	x	-	x
39	x	x	x	x	-	-	-	-	x	-	-	-	x	-	-
40	x	x	-	x	-	-	-	x	x	-	x	x	-	-	-

BIBLIOGRAPHY

1. Bowman, K.M. and Jellinek, E.M. Alcohol addiction and its treatment. Quart. J. Stud. Alcohol, 1941, 2, 98-176.

2. Jastak, J. Rorschach performances of alcoholic patients. Delaware St. Med. J., 1940, 12, 120-123.

3. Kelley, D. McG. and Barrera, S.E. Rorschach studies in acute experimental intoxication. Amer. J. Psychiat., 1941, 97, 1341-64.

4. Klopfer, B., Burchard, E.M.L., Kelley, D. McG., Miale, F.R. Theory and technique of Rorschach interpretation. Rorschach Res. Exch., 1939, 3, 152-194.

5. Miale, F.R. and Erickson, M.H. Personality structure in the psychoneuroses. Rorschach Res. Exch., 1940, 4, 71-74.

6. Piotrowski, Z.A. On the Rorschach method and its application in organic disturbances of the central nervous system. Rorschach Res. Exch., 1936-7, 1, 23-40.

7. Rorschach, H. Psychodiagnostik, 3rd Edition. Bern: Huber, 1937.

8. Strecker, E.A. Some thoughts concerning the psychology and therapy of alcoholism. J. nerv. ment. Dis., 1937, 86.

9. ---------- Chronic alcoholism. Quart. J. Stud. Alcohol, 1941, 2, 12-17.

10. Wertheimer, Max. Drei Abhondlungen zur Gestalt Theorie, 1925. Erlangen: Vurlog der philosophischen Academie.

THE INFLUENCE OF THE TIME FACTOR ON RORSCHACH PERFORMANCES

Edith A. Weisskopf, Ph.D.

The demand for the utilization of the Rorschach method as a selective device for service men has become more urgent during the last year. Such utilization, however, seems possible only if the procedures of administration, inquiry and interpretation could be modified so as to reduce the total amount of time spent. Harrower-Erickson's Group method(1) and Munroe's Inspection Technique(2) have been successful steps in this direction. The following experimental study, when extended to a large enough sample of subjects, might afford a foundation for another practical simplification of the administrative technique.

The study was stimulated by an incidental comparison between two Rorschach records taken by the same subject on the same day under very different conditions. The first test was taken individually and in a great hurry; the subject related after the test that she had been extremely nervous during the administration and had tried to get through the ten cards as quickly as possible in order to keep a very important appointment. The same subject happened to take a group Rorschach approximately half an hour after the individual test, administered with an exposure of three minutes for each card. The quantitative results of both tests are shown on p. 129, Case 1. The personalities revealed by each method are entirely different. The individual test, taken in a hurry, reveals a much more impulsive, immature, uncontrolled individual than the group test; the proportion between M and FM is reversed, that between FC and CF is changed in favor of CF, the form responses decrease from almost the borderline of constriction to a comparatively low F%.

It seemed as though this casual incident, if properly followed up, could give a clue to some new findings. Splitting up the varying conditions into their components, we doubt that the application of the group method versus the individual method could be responsible for the difference in performance. Harrower-Erickson reports various modifications of quantitative results concerning the F% and other data, but she stresses at the same time that those modifications are negligible and that the Group Rorschach gives approximately the same results as the individual performance(3). The effect of repetition has not been studied systematically yet but all evidence points in the direction of more spontaneity at the second performance.* Thus it might prove profitable to study the influence of "hurry", which represents another independent variable, on the quantitative and qualitative results of Rorschach performances.

The Procedure

The Rorschach test was given to each subject once under normal conditions, once with exposure of only ten seconds for each card. Ten subjects including the above case of natural pressure of time, have been used.

Because no general conclusions whatsoever can be drawn as yet from such a small number of subjects, no attempts have been made to choose a sample evenly distributed as to sex, age and other data. The only principle in selection was the author's familiarity with the case history. The short Rorschach preceeded the long one in eight out of ten cases. The time intervals between the two performances range from one half hour to two months. Large scale research with statistical treatment of the results would, of course, require careful control of the time interval and probably alteration in the order of presentation to reduce the effect of repetition.

* Experimental research on repetition is urgently needed as a basis for the solution of many other Rorschach problems.

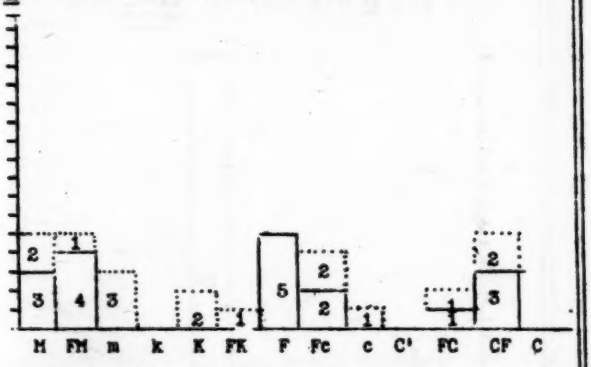
Results

No general conclusions can be drawn from only twenty performances. Therefore the quantitative results are given below for each subject individually.

CASE 1. Oct. 9, 1941 FEMALE Oct. 9, 1941 29 Years

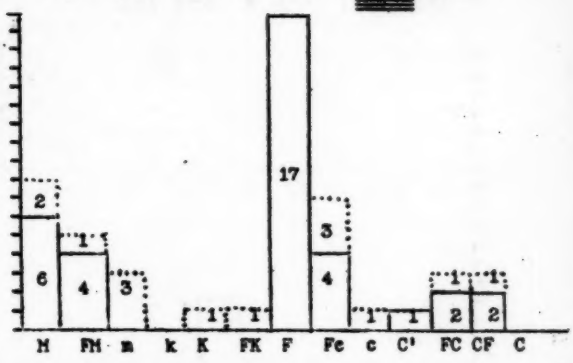
SHORT EXPOSURE

R = 18 (H+A):(Hd+Ad) = 11:1
F% = 28 P = 6
A% = 45 W:M = 12:3
M:sum C = 3:3.5
(FM+m):(Fc+c+C') = 4:2
VIII, IX, X / R = 22%
W 67% ((D)) 28% d Dd+S 5%



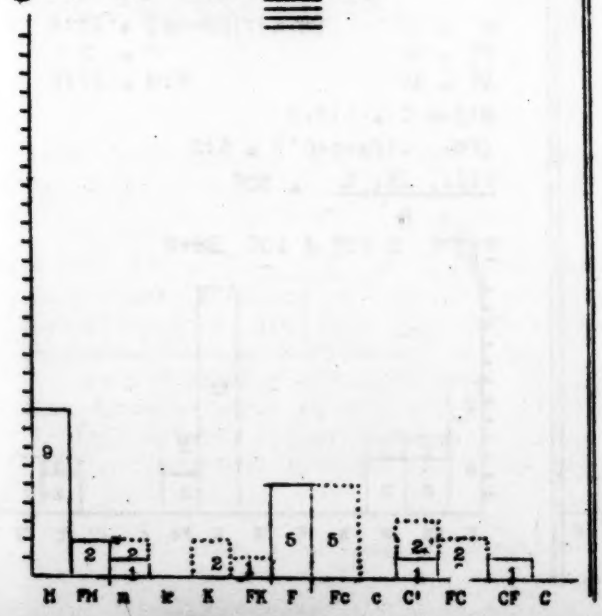
LONG EXPOSURE

R = 36 (H+A):(Hd+Ad) = 15:10
F% = 47 P = 6
A% = 36 W:M = 10:6
M:sum C = 6:3
(FM+m):(Fc+c+C') = 4:5
VIII, IX, X / R = 30%
W 28% (D) 43% (d) 3% Dd+S 26%

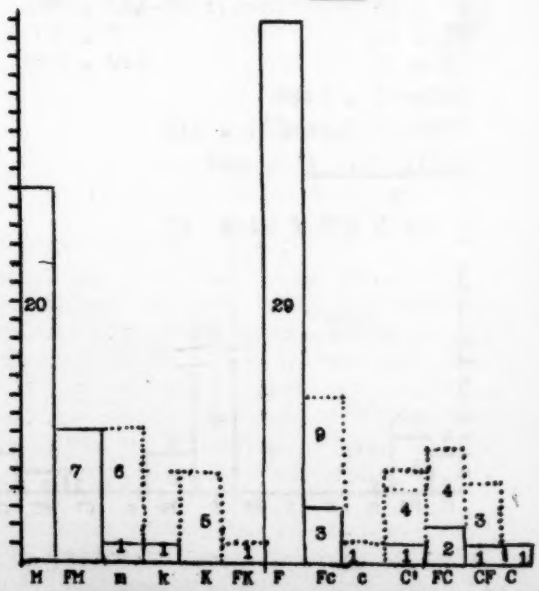


CASE 2. Jan. 10, 1942 FEMALE Nov. 15, 1942 34 years

R = 19 (H+A):(Hd+Ad) = 11:1
F% = 26 P = 2+3
A% = 16 W:M = 8:9
M:sum C = 9:1
(Fm+m):(Fc+c+C') = 3:1
VIII, IX, X / R = 42%
W 42% (D) 31% d Dd+S 27%



R = 66 (H+A):(Ad+Hd) = 29:14
F% = 44 P = 6
A% = 21 W:M = 20:20
M:sum C = 20:3.5
(Fm+m):(Fc+c+C') = 8:4
VIII, IX, X / R = 36%
W 30% (D) 42% d 8% Dd+S 20%

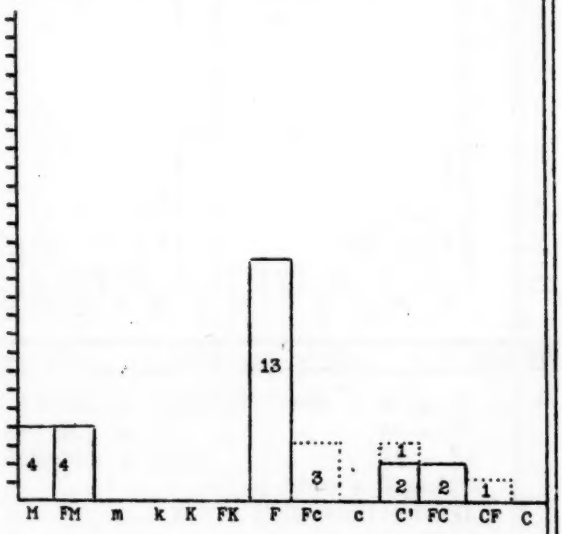


CASE 3. March 3, 1942 FEMALE March 6, 1942 42 years

SHORT EXPOSURE

R = 26 (H+A):(Hd+Ad) = 16:3
F% = 50 P = 8
A% = 54 W:M = 12:4
M:sum C = 4:1
(FM+m):(Fc+c+C') = 4:2
VIII, IX, X / R = 31%

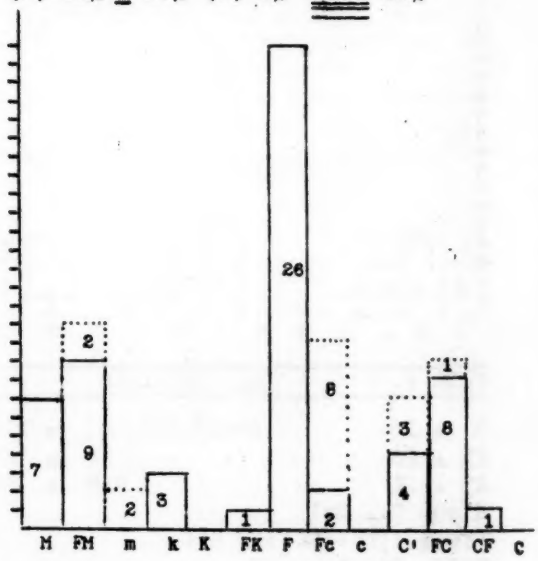
W 46% (D) 44% d Dd+S 10%



LONG EXPOSURE

R = 61 (H+A):(Hd+Ad) = 25:10
F% = 43 P = 5
A% = 43 W:M = 11:7
M:sum C = 7:5
(FM+m):(Fc+c+C') = 9:6
VIII, IX, X / R = 44%

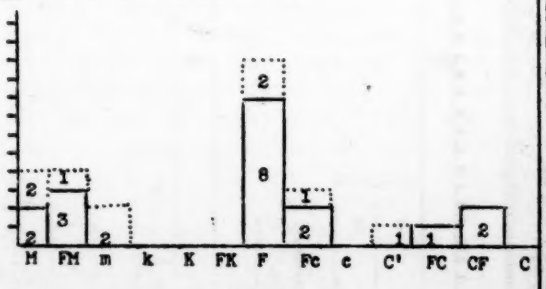
(W) 18% D 57% (d) 2% Dd+S 23%



CASE 4 FEMALE 45 years

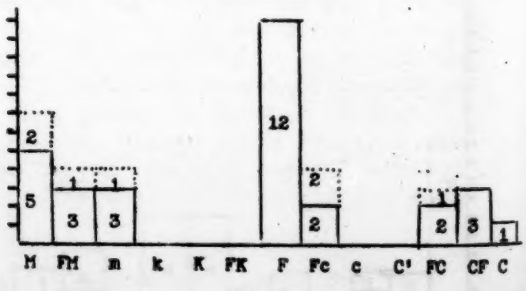
R = 18 (H+A):(Hd+Ad) = 9:1
F% = 44 P = 8
A% = 39 W:M = 8:3
M:Sum C = 2:25
(FM+m):(Fc+c+C') = 3:2
VIII, IX, X / R = 28%

W 44% D 50% d Dd+S 6%



R = 30 (H+A):(Hd+Ad) = 15:4
F% = 40 P = 7
A% = 47 W:M = 11:5
M:Sum C = 5:5.5
(FM+,):(Fc+c+C') = 6:2
VIII, IX, X / R = 30%

W 37% D 53% d 10% ~~Dd+S~~

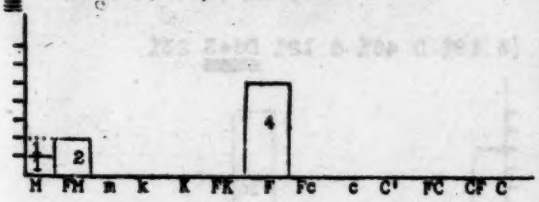


CASE 5. April 22, 1942 FEMALE May 11, 1942 23 years

SHORT EXPOSURE

R = 8 (H+A):(Hd+Ad) = 4:10
F% = 63 P = 3
A% = 38 W:M = 6:1
M:sum C = 1:0
(FM+m):(Fc+c+C') = 2:0
VIII, IX, X / R = 25%

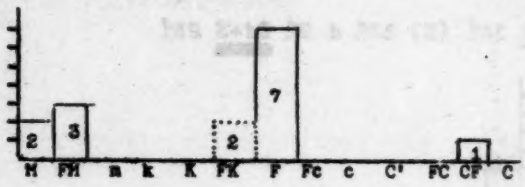
W 75% ((D)) 25% d ~~Dd+S~~



LONG EXPOSURE

R = 13 (H+A):(Hd+Ad) = 6:0
F% = 54 P = 3
A% = 31 W:M = 7:2
M:sum C = 2:1
(FM+m):(Fc+c+C') = 3:0
VIII, IX, X / R = 38%

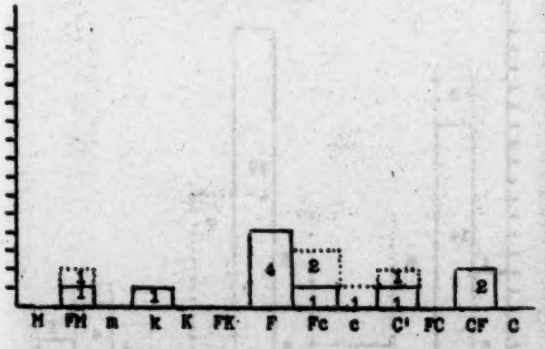
W 54% D 46% d ~~Dd+S~~



CASE 6 April 25, 1942 MALE May 17, 1942 56 years

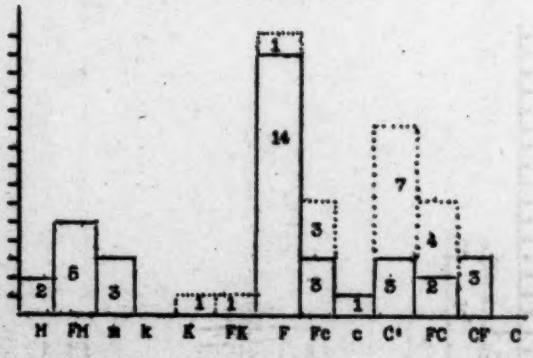
R = 9 (H+A):(Hd+Ad) = 4:1
F% = 44 P = 3
A% = 56 W:M = 5:0
M:sum C = 0:2
(FM+m):(Fc+c+C') = 1:2
VIII, IX, X / R = 22%

W 70% ((D)) 10% d Dd+S 20%



R: = 37 (H+A):(Hd+Ad) = 13:9
F% = 38 P = 6
A% = 46 W:M = 12:2
M:sum C = 2:4
(FM+m):(Fc+c+C') = 8:7
VIII, IX, X / R = 27%

W 32% (D) 41% d 11% Dd+S 16%

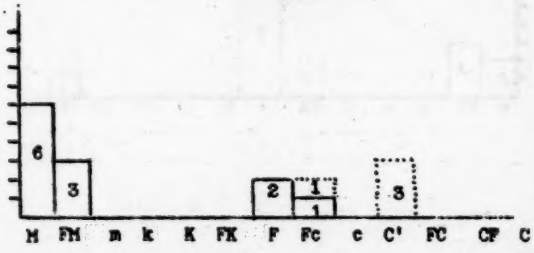


CASE 7. May 6, 1942 FEMALE May 21, 1942 17 years

SHORT EXPOSURE

R = 12 (H+A):(Hd+Ad) = 4:3
F% = 17 P = 3
A% = 42 W:M = 4:6
M:Sum C = 6:0
(FM+m):(Fc+c+C') = 3:1
VIII, IX, X = 33%
R

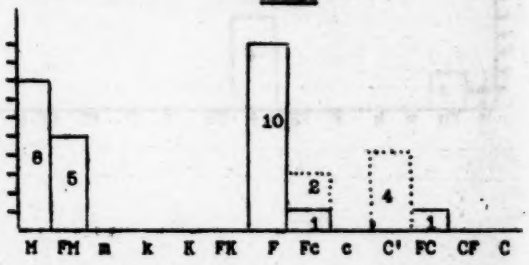
W 33% (D) 33% d 9% Dd+S 25%



LONG EXPOSURE

R = 26 (H+A):(Hd+Hd) = 16:7
F%= 38 P = 5
A%= 38 W:M = 5:8
M:Sum C = 8:.5
(FM+m):(Fc+c+C') = 5:1
VIII, IX, X = 38%
R

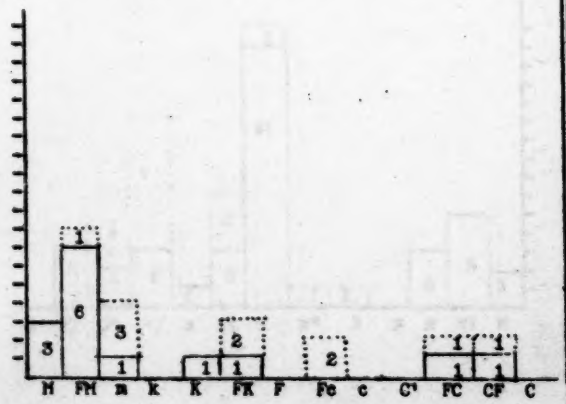
(W)19% D 46% d 12% Dd+S 23%



CASE 8. April 1, 1942 FEMALE April 8, 1942 28 years

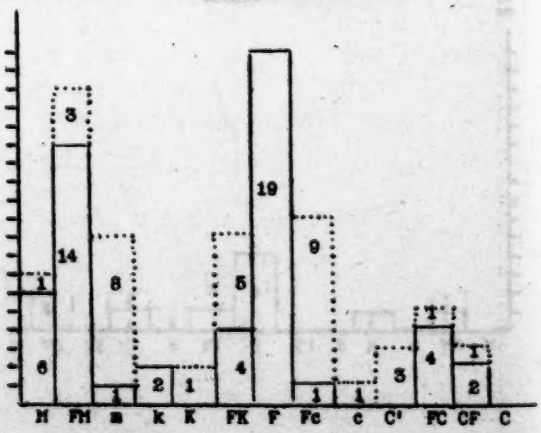
R = 13 (H+A):(Hd+Ad) = 8:3
F% = 0 P = 5
A% = 56 W:M = 5:3
M:Sum C = 3:1.5
(FM+m):(Fc+c+C') = 7:0
VIII, IX, X - 38%
R

W 38% D 55% d Dd+S 7%



R = 52 (H+A):(Hd+Ad) = 25:5
F% = 37 P = 6
A% = 42 W:M = 7:6
M:Sum C = 6:4
(FM+m):(Fc+c+C') = 15:1
VIII, IX, X - 38%
R

(W)13% D 63% d 12% Dd+S 12%

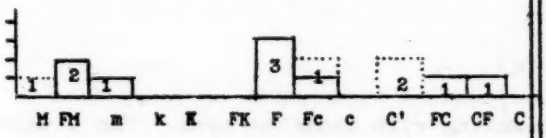


CASE 9 May 19, 1942 MALE May 22, 1942 49 years

SHORT EXPOSURE

R = 9 (H+A):(Hd+Ad) = 6:0
F% = 33 P = 3
A% = 67 W:M = 7:0
M:Sum C = 0:1.5
(FM+m):(Fc+c+C') = 3:1
VIII, IX, X = 22%
R

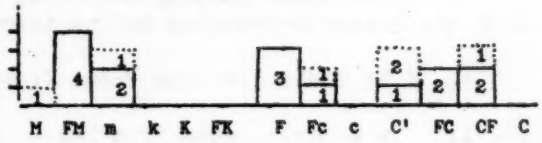
W 78% ((D)) 22% d ~~Dd+S~~



LONG EXPOSURE

R = 14 (H+A):(Hd+Ad) = 8:1
F% = 21 P = 5
A% = 57 W:M = 10:0
M:Sum C = 0:3
(FM+m):(Fc+c+C') = 6:2
VIII, IX, X = 43%
R

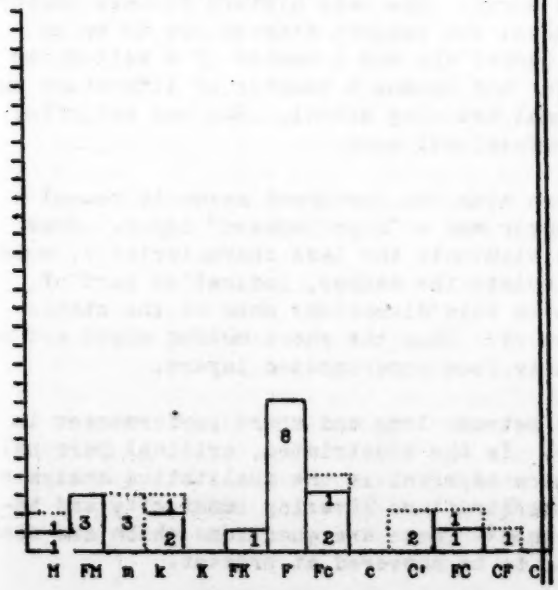
W 71% ((D)) 29% d ~~Dd+S~~



CASE 10 May 20, 1942 FEMALE May 26, 1942 22 years

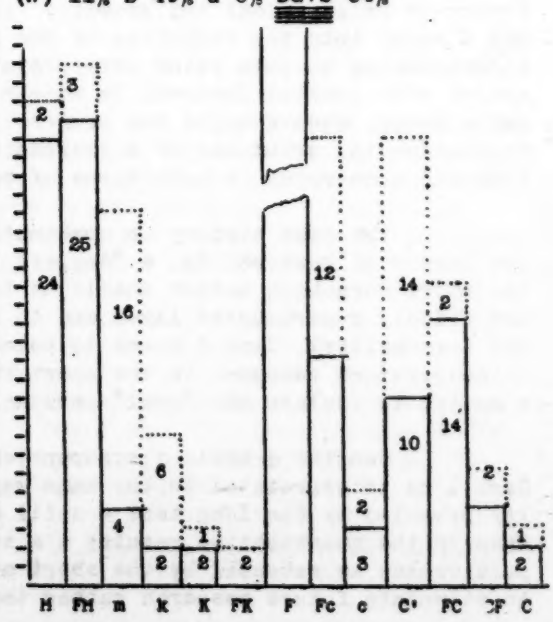
R = 16 (H+A):(Hd+Ad) = 7:0
F% = 50 P = 5
A% = 38 W:M = 9:1
M:Sum C = 1:.5
(FM+m):(Fc+c+C') = 3:2
VIII, IX, X = 12%
R

W 56% (D) 37% d Dd+S 7%



R = 186 (H+A):(Hd+Ad) = 66:12
F% = 41 P = 9
A% = 26 W:M = 20:24
M:Sum C = 24:14
(FM+m):(Fc+c+C') = 29:25
VIII, IX, X = 52%
R

(W) 11% D 49% d 6% Dd+S 34%



Discussion

It may prove profitable to submit Case 2 to a closer inspection. The sequence analysis reveals an interesting alternation between very dynamic M responses and very static F responses; the latter seem to be interspersed like foreign bodies in an otherwise extremely imaginative record. Some responses to card I and IV may serve as an example.

I. 1. A small figure within a large winged figure. The large one is imploring with mutilated hands lifted upwards. (Exquisite elaboration follows.) The combination of the two figures is like a personification of a tragic past with possibilities of some future within it.

2. Two masks.

3. Two women running away from one another, running diagonally upwards, with their skirts dragging behind them.

4. V It looks like the Papal Crown (W).

IV. 1. A monster, seen from below, advancing with menacing eyes. Has a mark on his forehead like Cain.

2. Two ears (upper outer d)

3. V A flying demon again, horned, coming towards me.

I, 1,3, and IV, 1,3 (the dynamic responses) are much more representative for the style of this record than the static responses I, 2,4 and IV, 2.

A blind interpretation described this alternation in the following way: the subject, of very superior intelligence, highly imaginative and artistic, afraid of being carried away by her imagination "pins" herself down to earth by trying to be practical and prosaic. She escapes from the emotional conflicts of the M world into the stability of the F world. The case history reveals features corresponding to this blind interpretation; the subject started out to be an artist with special interest in modern dance; she was a member of a well-known dance group, then changed her profession, and became a teacher of literature and thereafter the principal of a professional training school. She was satisfied with and successful in both types of professional work.

The case history in combination with the Rorschach seems to reveal two layers of personality, a "deeper" layer and a "superimposed" layer. Does the short Rorschach method enable us to eliminate the less characteristic, more artificial, superimposed layer and to isolate the deeper, indicative part of the personality? Case 2 seems to point in this direction: none of the static interspersions reappear in the short record. Thus the short method might act as a device to isolate the "real" personality from superimposed layers.

Can the drastic discrepancies between long and short performances in Case 1 be interpretated in the same way? Is the constricted, critical personality revealed by the long test - still more apparent in the qualitative analysis than in the quantitative results - a superstructure covering immaturity and impulsiveness as revealed by the short method? These are questions which are meant to stimulate future research rather than to be answered at present.

However the other eight cases show that a change towards greater spontaneity is in no way characteristic of the short performance in general.

Out of ten cases only four show an increase in the F% with longer exposure (in Case 8 a drastic increase from none to 37%); in the other six records the change takes place in the opposite direction. FM and M are also affected in various ways by the time factor in their absolute number as well as in their relative strength. The changes in FC and CF show more regularity; the longer exposure results in a greater increase of CF than FC responses in only one out of ten cases (Case 5). In 7 cases the longer exposure results in a greater increase of FC than CF responses. In two cases the FC and CF responses show an equal increase. (Case 4 and 9). (Only main determinants are taken into consideration.)

Can the short Rorschach be used instead of the long one as a time saving device for large scale testing? Are short records valid and indicative enough to be used for selective purposes in defense work? No definite answer can be given to these questions yet; large scale use must be based on large scale research. A qualitative analysis of the ten cases examined shows more resemblance between long and short performances than mere inspection of the quantitative data. In all ten cases the most characteristic responses, most representative of the record's style, seem to appear in both the long and short performances.

Munroe's inspection technique offers another approach to this problem. The following table gives the number of entries on the check list for the short record as compared with the long one.

	Short performance	Long performance
Case 1	6	2
Case 2	4	4
Case 3	3	3
Case 4	3	3
Case 5	6	7
Case 6	8	6
Case 7	5	5
Case 8	5	7
Case 9	6	7
Case 10	5	10

In Cases 2 to 9 the numbers are fairly close together, even if the actual signs checked are not identical in the long and short performances. If large scale research confirms these preliminary results, the short Rorschach might prove useful as a quick and rough method to eliminate extremely unadjusted and to pick highly adjusted individuals.

Case 10 shows an interesting variation in this regard. The long record has 186 R. The quality of form perception is vague and bizarre. The subject seems to cover systematically area after area of the blot trying not to miss a possible interpretation. The test and inquiry took four hours. However the subject was not impatient. She said, "One is not aware of the time if one tries so hard to do well." Her exaggerated intellectual ambition is also apparent in the content of her responses (maps, literary, ethnological, historical allusions). It is possible that the short Rorschach where those pecularities are hardly apparent may give a better picture of her personality, undistorted by forced or artificial responses.

Rejections are naturally more frequent with short exposure; they are equivalent to delayed reaction time (shock).

Thus Subject 6 rejects Card VI, possibly because of its sexual implications. Preoccupation with sexual matters is apparent not only from the subject's case history, but also from a symbolic analysis of his responses. (The only response to Card X in the short Rorschach is to the gray top center detail "a sting of an insect ...; it comes again in every card ...; it is not the sting in the rear, but in the head ...).

Subject 8 also rejects Card VI. Her case history shows more than usual inhibitions. In the long administration she sees the female genital organs as an additional response during the inquiry, after seven main responses to Card VI, two of which are k responses.

Subject 7, who shows color shock in the long performance and other signs of color disturbance, rejects Card II and IX, the latter with the exclamation - "More color?"

Future short Rorschach research may yield one of the following results:

1. The short performance may prove to be entirely without any diagnostic value.

2. The short performance may become a quick and practical sieve for crude large-scale selection, especially in combination with other time saving methods.

3. The short performance may be revealed as a better diagnostic device than the usual method, eliminating forced, artificial responses.

According to Hermann Rorschach F responses are less "fool-proof" than e.g. M responses, and D responses and can be simulated more easily than W responses. It is interesting to state in this connection, that the W% is increased by short exposure in all ten cases.

4. The two methods may reveal different aspects of the personality.

The short method may reveal a deeper layer, a personality picture denuded of its "persona", less modified by super-ego and desire to appear in a certain way - caught unaware in an unexpected "candid" shot, or it may reflect the subject's reaction to pressure, either specifically to pressure of time, or to pressure in general. Some subjects may prove to lose control under pressure, others may intensify the use of their control mechanism. Thus the short Rorschach might develop into a more important contribution for defense work than merely a time saving device; it might help in predicting how subjects would react in tense situations.

Does a projective performance given under unusual, artificial conditions enable us to draw conclusions concerning the subject's reaction to those very conditions when they appear naturally? If this proves to be the case, the diagnostic applicability of projective techniques is unbounded.

Bibliography

1. Harrower-Erickson, M.R., "Directions for the Administration of the Rorschach Group Test; Rorschach Research Exchange, 1941, Vol. 5 pp. 145-153
2. Harrower-Erickson, M.R., "Modification of the Rorschach Method for Use as a Group Test, Rorschach Research Exchange, 1941, Vol. 5 pp. 130-199.
3. Munroe, R., "Inspection Technique", Rorschach Research Exchange, 1941, Vol. 5, pp. 166 - 191.

NOTES ON PUBLICITY

Ph. Harriman, Ph.D.

The publication of a manual of Rorschach theory and practice is certain to attract a widespread audience among students of this important development in clinical psychology. When a new textbook is launched with a fanfare of publicity in a popular weekly magazine, it is certain to attract readers who may have heard something about the Rorschach procedure and who wish to further their knowledge. Such a book was announced in the Medicine section of TIME on March 30, 1942; and an article, illustrated by reproductions of two of the blots, presented what purports to be a description of the Rorschach technique.

No doubt, neither the authors of this new book nor the publishers can be held responsible for the misleading information contained in this popularized news article. It is most unfortunate, however, that in the minds of many people the Rorschach method is now associated with the TIME article.

ANNOUNCEMENTS

I. A report about the annual meeting of the Rorschach Institute, held on May 23, 1942 in New York City, containing abstracts of the more important committee reports, together with the Presidential Address on "The Modifiability of the Human Personality as Revealed by the Rorschach Method" by Zygmunt Piotrowski, will appear in the October issue. This issue will also contain the usual reports of the various regional divisions.

II. Editor's note:- The co-author of the article "Some Principles of Gestalt Psychology in the Rorschach Experiment" in Volume VI, Issue I, pages 1-12, mentioned as "E. Fromm, Ph.D." is Dr. Erica O. Fromm. She is also the co-author of the paper mentioned on page 8, line 13, and in the bibliography on page 15, under No. 14.

III. The Committee on Publications of the Rorschach Institute proposed the following resolution, which was adopted by the members at the annual meeting of the Institute, May 23, 1942:

> The Rorschach Institute is unqualifiedly opposed to the reproduction of the Rorschach Ink-blots in magazine articles, whether they be popular or scientific periodicals, and whether they be intended for the lay public or for professional readers.

Grad Sch Psych
V C O P CT SC T A SH CA